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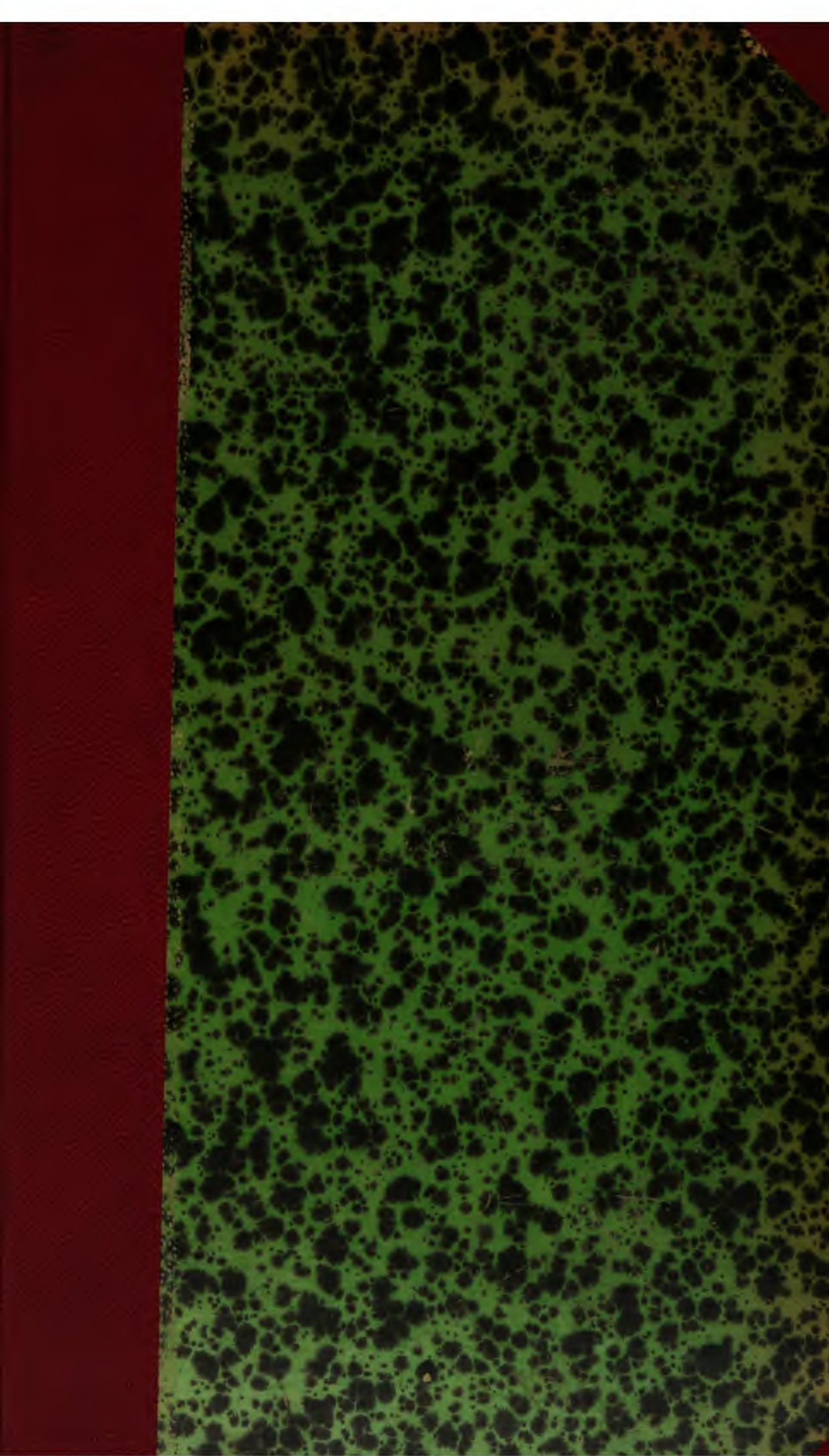
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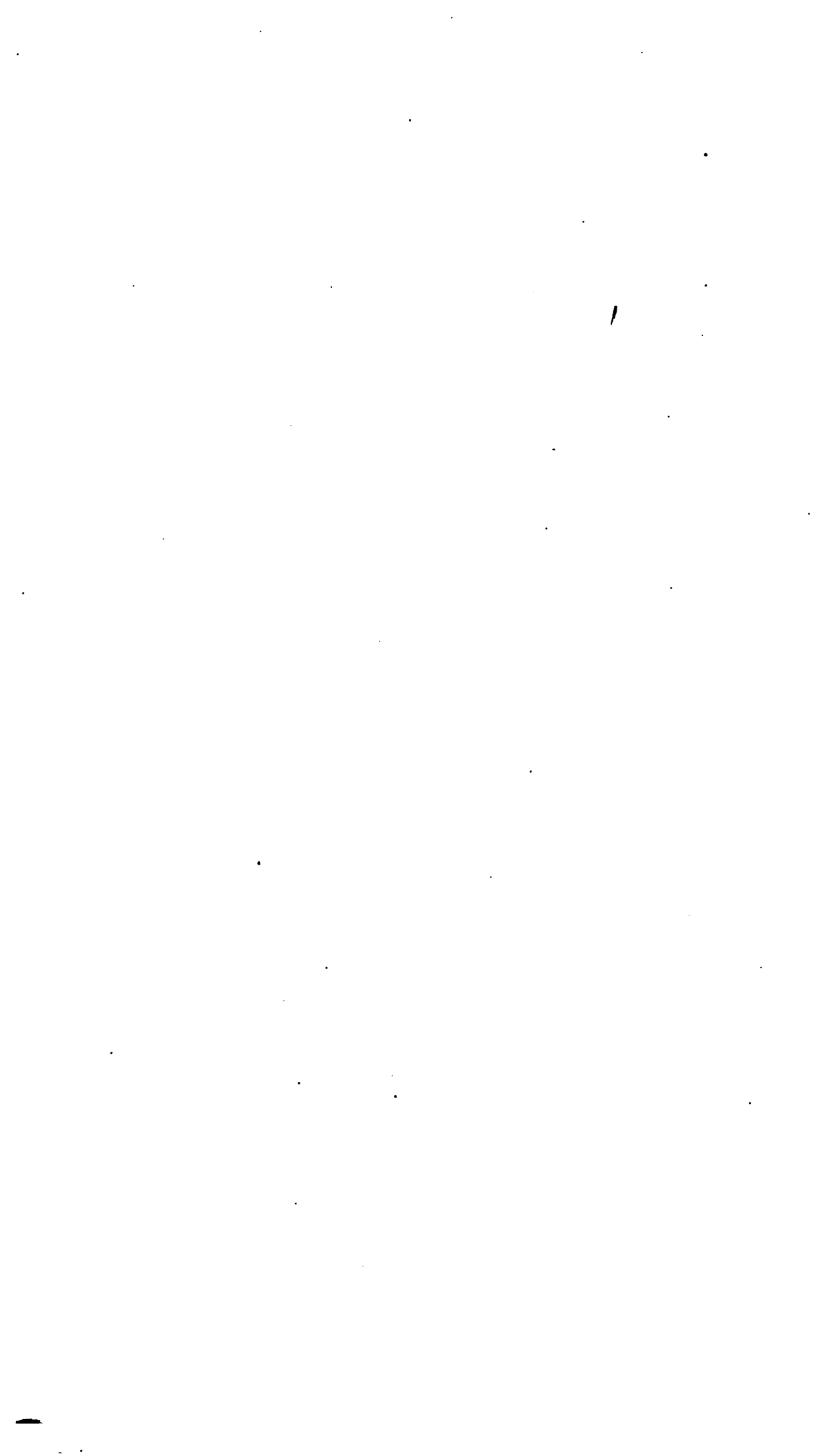
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THE GENITAL FACTOR IN CERTAIN CASES OF NEURASTHENIA IN WOMEN.

A Clinical Lecture Delivered in the Clinical and Pathological School of the Cincinnati University at the Cincinnati Hospital.

BY CHARLES A. L. REED, A. M., M. D.,
CINCINNATI, OHIO.

Ex-President of the American Association of Obstetricians and Gynecologists; Ex-Secretary-General of First Pan-American Medical Congress, Gynecologist to the Cincinnati Hospital, etc., etc.

OUR LECTURES have been so exclusively surgical that I purpose changing the program a little to-day; and I offer no apology for discussing the more medical aspects of the cases that I shall present to you. It is somewhat important, at times, to emphasize the fact that gynecology—or rather abdominal and pelvic surgery, as it has come to be—can never be considered in the light of an absolute specialty; by which I mean a specialty dissociated from the general field of scientific medicine. On the contrary, as these cases will show, it is essential to a complete comprehension of the case, that all lesions within the pelvis be considered in the light of their possible relations to functional, or, for that matter, organic disturbances more or less remote from the genitalia. This is especially true with regard to those more or less complex systemic states which involve perversion of the various nutrient phenomena. These conditions, or at least some of them, are exemplified in the cases that are awaiting our consideration this morning. But before I bring them in let me emphasize the relationship that exists between the female organs of generation and the general system. You have heard me say that these

organs are not to be considered as vital; that they are not essential to either life or health, and that nature seems to have tucked them away in a corner of the anatomy where they will be quite out of the way after they shall have ceased to subserve the purpose of reproduction. Now, while all this is true, I would not have you think that there is not a most important relationship between them and the general system, relatively to which they are so much "a thing apart." Your anatomical knowledge would instantly correct any such misapprehension;—but let me refresh that knowledge just a little.

You know, of course, how pronounced are the circulatory connections between the female generative organs and the general system—how the lymphatics and the veins are open highways for the easy transit of nutrient elements or of morbid agencies from the womb to the general system, and for that matter *vice versa*. I have had repeated occasion to demonstrate to you here in this amphitheatre, the disastrous results of systemic invasions of this character. But to-day I wish to fix in your minds the fact that, intimate as are these circulatory connections, the nervous connection is still more intimate and through this connection the whole system may become disturbed so far as its rhythm of functional activity is concerned. Remember that from the sacral plexus of the cerebro-spinal system, are derived several branches; one of which, the ileo-inguinalis, goes to the skin of the labiæ; another, the crural branch, to the round ligament and to the inguinal skin; another, the hemorrhoidal, goes to the fundus of the womb and to the bladder; another, the perineal, to the sphincters and to the

perineum, and there is still another that goes to the clitoris and to the nymphæ. Now, all of these nerves are of the cerebro-spinal system; but you will recall another very important fact and that is that this system commingles, through the instrumentality of the anterior communicating branches, and, in instances, by more direct anastomosis with the great sympathetic system. This, the great sympathetic, which presides so directly over the entire process of nutrition, also furnishes an abundant supply of branches directly to the womb, the ovaries, the vagina and the external genitalia. Thus there is a direct branch from the renal plexus to the ovaries, from the spermatic plexus to the womb, ovaries and Fallopian tubes; and then there is the inferior hypogastric plexus, which seems to send the filaments to practically all of the organs within the pelvis, including the rectum. What is the significance of all of this? It simply means that the genital organs of women, considered in the aggregate, are nothing more or less than a central telegraphic office, from which wires radiate to every nook and corner of the system, and over which are transmitted messages, morbid or otherwise, as the case may be;—and it should be remembered right here that telegraphic messages travel both ways over the same wire; that there are both receiving and sending offices at each end of the line. The great physiological manifestation of this fact is to be found in pregnancy. How general it is that a woman after conceiving, increases in flesh and weight, her nutritive functions being stimulated to the maximum of activity. Then we see, as in these cases to-day, the very opposite. There is disease, demonstrable disease, now within the pelvis of one of these unfortunate women and there was in the pelvis of the other; but I want to talk to-day more about the constitutional results of these diseases than about the local conditions themselves.

Here is the first woman. She is 31 years old and had a child six years ago. She had an induced miscarriage four years ago and since that time she has not been well. Her symptoms have been of the pelvic order—

everything seeming to radiate from that center. I find that her womb and ovaries and Fallopian tubes are bound into a mass, the result of a previous acute inflammation. As she has no temperature now, I fancy there is no acute inflammation at this time, and as she has no leucocytosis, I infer that she is without recent infection and that there is no suppuration within the pelvis. But look at her general condition. She is wasted in flesh and there is no color in her cheeks or lips. She has no appetite; her tongue is furred and she is constipated. She seldom sleeps well and at times has splitting headaches. She says she is nervous and easily fatigued. Her pulse in repose is over a hundred and she complains of frequent irregularities of the heart, particularly in the evenings. She is mentally depressed—always has the “blues.” In short, gentlemen, this woman is a typical neurastheniac.

Now let me turn to this other case, she is not much older than the first one, and I operated upon her in your presence about six months ago, breaking up some old adhesions within the pelvis and correcting an old retroversion. The uterine appendages, however, were not removed, as their condition did not indicate it. At that time, she too, was a typical neurastheniac—as bad, if not worse than the first case that I have presented to you. But look at her now. She has kindly come here to-day, at my request, to let you see the results of treatment. She has gained nearly thirty pounds in weight, eats well, sleeps well and is well.

I have presented these two cases together that you might appreciate, by contrast, the manifest influence of the local condition upon the general health—yes, let me be more explicit, and say the influence of intrapelvic lesions upon the causation of neurasthenia. I assure you that there is hardly a case upon my service, particularly a chronic case, but that is an exemplification of the same general truth.

How are we to establish the relationship of cause and effect between these pelvic diseases and these constitutional states? The chronologic element of the histories is suggestive

to say the least, the pelvic disease occurring in the majority of all instances as the initial departure from health. The succession of events, from this point, is generally easily traced, but if they were not a reasonable interpretation of known physiological and pathological laws, would enable us, logically, to trace the connection. The constitutional disturbances incident to puberty, to the menopause, and for that matter to sexual excitement, are but so many examples of nerve perturbation, with a tendency to nerve exhaustion. Of course, in ordinary and physiological instances, they are within the normal limits, but still the resemblance to the morbid phenomena of neurasthenia is so striking that the differences are of degree rather than of kind. In each instance there is a local cause for the change—the evolutions of puberty, the involutions of the menopause and the local congestions incident to sexual excitement. If it be true that, on the physiologic side local pelvic conditions thus modify constitutional states, it must be true on the pathologic side, that equally pronounced pelvic conditions produce equally pronounced constitutional states. The variation of effect is equal only to the variation of cause, the concomitant circumstances being the same. But let us pass from the general to the concrete. Take the case of accidental pain—a traumatism, if you please, and note the phenomena. There is disturbance of the cardiac and respiratory rhythm, the superficial capillaries become contracted, there is a more or less pronounced prostration, and the whole is followed by the excretion of an excess of uric acid. This latter circumstance indicates that there has been an abnormal increase of waste in the process of metabolism. Now let us change the picture. Instead of the victim of an accident or an injury, take one of these women whom I have presented to you, and for the sake of the argument, leave out of consideration for the present, the elements of infection, of work and of worry. A painful condition, and a constant painful condition, at that, has been established in the pelvis. This is always true in cases of retro-displacement of the womb with fixa-

tion, in occlusive inflammations of the Fallopian tubes, in follicular degeneration and inflammatory fixations of the ovaries, in intestinal hyperplasiae of the uterus, and in many other conditions. Now what must be the result of these painful states in their influence through the rich nerve connections of which I have already spoken, upon the general system? Obviously there must be a repetition, in kind if not in degree, of the results of the traumatism, with the difference, however, that the traumatism was transient, while the pelvic state is persistent. The metabolic changes induced temporarily by the injury are induced constantly by the diseased organs. The resulting influence upon metabolism is marked. The observations in my service in this Hospital indicate that, in practically all of these cases the proportion of the uric acid is increased to one in forty, one in thirty-six and, in one instance, to more than one in thirty. The daily amount of urine in these cases is below the average and, of course, the specific gravity is uniformly high. Occasionally we find albumin, but generally without other evidence of renal lesion.

At this point begins the multiplication of difficulties. The lithæmic condition becomes exaggerated. The poisons of the uric acid group increase apace, within the circulation, with the result of still further lowering the tone of the nervous system. This is noticeable especially in the sympathetic and finds expression in retarded peristalsis and consequent impairment of digestion, both gastric and intestinal. Constipation ensues, and when constipation begins, then begins auto-intoxication, due to the absorption of stercorine, as discovered and demonstrated by Flint, and of other salts found in the feces. It were useless for me in this lecture to try to trace the hydra-manifestations of neurasthenia. From the point at which we have now arrived in our discussion, it is but a step to any of the neurasthenic possibilities. My purpose will have been accomplished when I shall have fixed in your minds the fact that these intra-pelvic states are among the most potent factors in the causation of neurasthenia. The

pathology of this disease is far from complete when these states are not taken into account; and yet, self-evident as is the proposition, certain neurologists, notably Dana, in a recent encyclopædic article, fail to give it recognition. It is for this reason that I call your attention to it with the greater emphasis.

And now, lest I be misunderstood, let me hasten to be explicit in the declaration that this is not the only cause of these nervous phenomena; it is only one of many; work, exposure, food too rich or too poor, dissipation, injuries, acute diseases, excessive fecundity, sexual indiscretions and worry, are all potent causes. Then, on the other hand, there must be recognized what a lamented writer on this subject once called "nerve counterfeits" of uterine and ovarian disease—cases in which the patient's complaints all center around her genitalia, the various organs of which present no manifestations of disease. These cases are to be carefully differentiated, and are to be treated in accordance with their respective indications.

LOCAL TREATMENT.

What are we to do for cases of neurasthenia with extra-pelvic lesions, or, for that matter, what are we to do for that even more troublesome class of cases in which there exists a nerve counterfeit of genital disease rather than the disease itself? I know of no class of cases in which the golden rule of therapy should be so rigorously observed,—the rule which demands that treatment shall begin with the removal of the cause. Therefore, where there exists intra-pelvic disease, begin by giving it attention. Is there a retroflexed or a retroverted uterus with fixation? Give it attention, but don't—don't, as you love the welfare of your patient, as you revere the sacredness of your professional trust, don't afflict the unfortunate woman with always worse than useless pessaries. Is there degenerative change of the uterine appendages? Give your patient the advantage of the practically always successful resources of our surgical art. And thus you may go on through the whole category of pelvic diseases in women.

CONSTITUTIONAL TREATMENT.

Now while the rational inauguration of treatment must be by giving attention to the cause, it must be remembered that in practically all of these cases we have certain consequences, certain acquired constitutional states, with which to contend. These states are easily summarized in the general expression—uric acid diathesis, and consist, essentially, in the retention in the system of the products of metabolism. Uric acid, urea, xanthine and paraxanthine are among the chief factors of mischief. If to these you add the toxic products absorbed from the always sluggish bowels you can realize how thoroughly poisoned is the system. We are generally confronted by this state of auto-infection, not in the form of a developing process, but in the form that our French friends would call a *fait accompli*. It is essential in all of these cases, either before or after any surgical interference that may be required, to neutralize these poisons and eliminate them from the system. In this connection you must select your remedies wisely if you would realize the best results. The salicylates are anti-lithæmics having a certain value, but unhappily they generally upset the digestion. Lithia is chemically and physiologically the logical remedy in these cases, but as ordinarily obtained preparations of it are worthless, because besides its tendency to hyperalkalize the stomach it is rarely assimilated by the system in quantity sufficient to produce desired results. The lithia waters which abound in the markets unfortunately do not abound in 'lithia' to the degree that gives them a therapeutic value beyond that which depends upon the water itself rather than upon anything it contains. I therefore do not prescribe them except as a sometimes necessary pretext to get my patient to drink water in abundance, and as this is a very expensive proceeding, I generally order some pure spring water, or, what is just as good, some distilled water, and put what I desire into it. It is always desirable to give your patient a laxative, and to avoid the multiplication of potions, it is well to combine it with your other agents, whether they be

the salicylates or lithia. For the last few months I have been using a remedy that presents a happy combination of these qualities—a new salt of lithia known as thialion—but why so called I am sure I do not know, but I do know that with it I have been able to lessen the acidity and lower the specific gravity of the urine more rapidly than by any other means. I use it by giving a teaspoonful in hot water before meals. In the course of thirty-six to forty-eight hours, its gently laxative effect is realized. From this time on I give it less frequently. By the end of the next day the systemic effect is manifested. I am rather fond of giving a full dose of it a little while before retiring—an innovation, I believe in the manner of using it, but I have been able easily to thus perpetuate its once established effects by a minimum of both drug and dosage. The bowels are put into a condition of normal activity. Certain of these cases are anæmic, and require a reconstructor. As a rule they are intolerant of iron, which generally adds to the mischief by interfering with digestion and intensifying the pre-existing constipation. I have been able to increase the hæmoglobin and reduce the usual leucocytosis of these cases most effectively by employing the formula of my old friend Dr. Barclay, for the administration of gold in combination with arsenic, a product now obtainable under the title of *arsenauro*. A diet from which dark meats are excluded should be enjoined. Active muscular exercise out of doors should be indulged in consistently with the strength of the patient. Daily baths, but never cold ones, should be made a matter of routine. An occasional sudorific bath is an advantage. When the patient cannot take active muscular exercise, out of doors, she should be treated by being given passive exercise in the form of massage—and just here we come to an important part of the treatment of these cases, I mean the

MORAL TREATMENT,

or, I should say, the disciplinary treatment. These cases, at least until they are brought under control, do best away from home. The in-

fluence of a strange physician and strange surroundings is simply paramount in many of these otherwise intractable cases. They should be placed under the most careful surroundings, but as a rule they ought not to go to institutions, public or private. The surroundings are generally depressing to persons of hyperæsthetic sensibilities and but little vital resistance. I follow the rule of Weir Mitchell, and place these cases, particularly those whose pelvic lesions do not demand operation—and let me add, parenthetically, very many of them do not—I say I generally place these cases in private nursing homes, bright and cheerful, owned and conducted by an intelligent woman trained to the care of such patients. Once placed under these desirable surroundings I can bring medicine, suggestion—a powerful remedy—discipline, hygiene, everything necessary indeed to secure the desired result. If you follow the line of treatment, the line of general management that I have indicated, you will be rewarded with the recovery of cases that will otherwise harass your life, if they do not actually damage your reputation.

ON CHLORALAMID.

BY W. KRAMM, M. D.,
BERLIN.

SINCE the discovery by Liebreich in 1869 of the hypnotic effect of chloral hydrate, there have been recommended, particularly during the last decade, a large number of other chemical substances for the purpose of producing sleep. For most of these the claim was made, when first introduced, that they were free from one or another of the untoward incidental effects of chloral hydrate. Of these substitutes for chloral, however, only few have found extensive use in medical practice, and among them is chloralum formidatum, or chloralamid as it is generally briefly called, which was incorporated into the new German Pharmacopœia in 1893, and is most closely related to chloral in its constitution and action. When it was first produced at the instigation of von Mehring, a clinician of Strass-

burg, in 1889, the claims chiefly made for it were that it was preferable to chloral on account of its taste, being only faintly bitter, mild, and not caustic, and of having no undesirable incidental effect upon the heart and the circulation. Now that we have at our disposal an ample literature upon the medicament and nearly a decade has elapsed since its introduction, it will be profitable to inquire whether the results obtained with it, as recorded in the medical press, are such as will entitle it to a permanent place among the useful and reliable hypnotics.

Chloralamid forms hard, odorless crystals having a white lustre. Weak acids do not affect it, but it is decomposed by alkalis. Decomposition also occurs in a watery solution at a temperature above 60°C. (140°F.), but below this point the solution is stable. For these reasons chloralamid is incompatible with hot fluids and alkaline solutions, but it may be given in slightly acid liquids. H. White cautions against its administration in powder form, or in milk, because under such conditions the drug dissolves very slowly, so that the patients do not sleep the same night, but during the following day. Kny particularly recommends the use of the remedy in alcoholic drinks, which should be slightly warmed to favor its solution.

The dosage of the drug, of course, depends upon the indication in the concrete case. The Pharmacopœia states the largest single dose to be 4 gm. (3j) and the largest daily amount 8 gm. (3ij). The several doses used in practice range between 1 and 4 gm. (gr. xv and 3j). While the small doses of 1 gm. mostly fail to produce sleep, and according to Alt even the repeated administration of small daily doses (1 to 2 gm.) to maniacal patients had a sedative effect only in three out of seven cases, it was, on the other hand, but rarely necessary to resort to the maximal dose of 4 gm., so that the ordinary hypnotic dose may be stated as 2 to 3 gm. (gr. xxx to xlv). According to Kny, Langgaard and Råbow, 3 gm. of chloralamid are equal in effect to 2 gm. of chloral hydrate.

In its action chloralamid proves to be a true hypnotic. The first clini-

cians who tested the drug gave it repeatedly during the day, even in the morning after a good night's rest, to healthy persons and unknown to these, and under such conditions it produced its hypnotic effect. The onset of the sleep is stated by all authors to be tardy as compared with chloral; the time that elapses until sleep occurs is on the average from one-half to one hour, but it may be as short as twenty minutes. The duration of the sleep varies between two and nine hours, the average of the full effect being given as about six hours.

As regards the indications for the exhibition of chloralamid, it proves serviceable in simple insomnia and has been specially recommended for sleeplessness in children, and, on the other hand for senile wakefulness, in which conditions it may be given as both safe and effective. As to its use in acute somnatic diseases observations are recorded among others by Sympson, who found it reliable in the sleeplessness and delirium associated with febrile affections, such as pneumonia, pleurisy and influenza; and by Paterson, who secured quiet sleep in two cases of typhoid delirium. Numerous instances are recorded in which chloralamid was given for insomnia in chronic diseases. In a case of Bright's disease in which sleep was seriously interfered with by almost constant headache, for which various remedies had been tried, Paterson repeatedly secured sleep lasting eight hours—"the best night's rest in a long period"—by a dose of 5 gm. The same author found the effect of the drug on the whole satisfactory in the insomnia of phthisis; moreover, in two out of three cases of the kind a noteworthy fact was that the chloralamid at the same time diminished or arrested the profuse and exhausting night sweats. In order to give an approximate idea of the activity of the drug in some other chronic affections, a few brief extracts from case reports by the last named authors may here be included:

(1) Emphysema and left pleurisy. Morphine failed to produce sound sleep. After doses of from 2 to 3 gm. of chloralamid restful sleep was obtained seven times. In the morn-

ing there was half an hour's headache, which was willingly borne.

(2) Hepatic cirrhosis and alcoholism. Restless nights, sleep often interrupted. After 3 gm. of chloralamid sound sleep until morning.

(3) Convalescence from pneumonia and alcoholism. Sleep disturbed by uneasiness. After 3 gm. of chloralamid very good results on two occasions.

(4) Severe gastric ulcer. Sleep disturbed in spite of the use of morphine. After 3 gm. of chloralamid on five occasions sound sleep during the night, prolonged for nearly all of the following day.

(5) Trichinosis. Since the onset of the disease only four hours' sleep, frequently interrupted. After 3 gm. of chloralamid eight hours undisturbed sleep; in the morning dull headache and dejection.

(6) Sacculated pleuritic exudate. After 2 gm. of chloralamid sleep with slight interruption until morning.

(7) Chronic gonorrhœa and cystitis. Sleep very often interrupted. After 3 gm. of chloralamid very sound sleep, tired feeling remaining the morning.

(8) Scurvy. Sleep frequently disturbed. After 3 gm. of chloralamid sound night's rest.

(9) Chronic constipation, arteriosclerosis (senile disturbances). Sleep very unsatisfactory, but became good and sound after 3 and 2 gm. of chloralamid respectively.

(10) Contracted kidney with severe uræmic headaches. Sleep much disturbed. Very good results on two occasions after 3 gm. of chloralamid.

Special interest attaches to a group of diseases in which chloralamid was believed to be a less dangerous remedy.

A summary of the experiences gained with chloralamid as an hypnotic would be incomplete without mentioning the incidental effects caused by it as well as by any other medicament, for not rarely it is the incidental effects which often exclude an otherwise valuable remedy from the bedside, and a knowledge of which enables us to form a definite opinion as to its applicability.

While most authors do not fail to notice certain incidental effects in the use of chloralamid, the majority agree that these are so insignificant that they constitute no contra-indication to its employment in various affections. Alt reports in twenty-five per cent. of his cases, certain by-effects, such as headache and stupor, after larger doses of 4 gm., vertigo, once hilarious intoxication and once nausea. Lettow observed exceptionally headache and vertigo; Gordon, after medicinal doses (2 to 3 gm.) exceptionally vertigo, inco-ordinated movements and headache; Hagen and Hüfler, in eight among twenty-eight cases, slight headache and stupor, "which were willingly borne;" Mayberry, a few instances of stupor and mild vertigo; Paterson, occasionally vertigo and malaise after 2 to 3 gm. That the above mentioned by-effects of chloralamid in medicinal doses are not too frequent is evident from the fact that several authors have seen nothing of the kind despite numerous trials of the drug. Thus Reichmann after fifty-two separate trials was able to affirm the absence of any untoward results that might possibly be looked upon as contra-indications; Rabow in fifty-two cases observed no material by-effects; Kny, who gave one hundred doses to thirty-one patients, states that no complaints were made to him about mental dullness or bad taste in the mouth; Strahan, after giving the drug more than two hundred times, noticed no nervous disturbances or headache; and Friis, after giving four hundred and ten separate doses of 1 to 2 gm., was unable to report any untoward incidental effects. With rare exceptions in which nausea, vomiting and gastric pain were complained of, all authors agree that chloralamid is well borne by the stomach, causes no irritation of the digestive tract, and does not impair assimilation or appetite. While Halasz and Katz in artificial digestion experiments noticed considerable reduction of peptonization after an addition of chloralamid, Kny states that the drug may be taken even by sensitive patients and those affected with gastric disturbances, without the occurrence of any dyspeptic symptoms.

THE EXTERNAL AND INTERNAL USE OF XEROFORM IN DERMATOLOGY.

BY DR. EHLMANN, LECTURER,
VIENNA.

THE AUTHOR has used xeroform in his clinic for more than a year, and believes that he is in a position to pass judgment upon its therapeutic value. He has treated 178 patients with it externally, and 45 patients internally; and since 13 of these latter cases belonged to the first class also, the entire number of cases treated was 210.

The external cases were partly superficial diseases, partly clean incised and operative wounds, and partly suppurations and necroses of the skin.

I. Superficial diseases.

Balanitis.....	41 cases.
Moist eczemas.....	30 "
Traumatic erosions of the genitals.....	8 "
Eczema of the anus and nates (13 of them treated inter- nally also).....	15 "
Iodoform eczemas.....	9 "

II. Suppurations and necroses.

Chancroids.....	47 cases.
Varicose ulcers.....	11 "
Tuberculous ulcerations of the nose and penis (1 of each).....	2 "
Phlegmons of the hand with panaritium.....	5 "
Suppurating buboes.....	11 "
Incised furuncles.....	3 "

III. Clean operative wounds.

Extirpation of dermoid cysts	2 cases.
Excision of chancre.....	4 "
Phimosis operations.....	8 "
Excision of mollusca fibrosa	4 "
" "periurethral false passages.....	2 "

Considering class III first, the author states that the wounds were sutured, powdered with xeroform, and according to their seat and size, covered either with xeroform gauze or simple sterilized gauze, and bandaged. Sometimes straps of the 5 per cent. collempastrum saponatum salicylicum were used.

All the operative wounds healed by primary intention; there was no trace of suppuration in the sutures.

As regards the suppurative processes, the author can add to the

favorable reports made by others the facts that there never occurred under the xeroform dressing the granulomatous formations leading to pus retention in the panaritiums and phlegmons of the hands, nor the maceration of the epidermis and the artificial eczemas that are so common with iodoform. The same was true of the chancroids. When the layer of xeroform was washed away daily with lukewarm water and the powder reapplied, cicatrization occurred on the average in two weeks.

In the extensive varicose ulcers, the secretion diminished rapidly; a matter of importance for quick cicatrization. The ulcerated surfaces were powdered with xeroform, and then covered with the 5 per cent. collempastrum saponatum salicylicum; the plaster being renewed twice and the powder once in 24 hours. A more frequent application of the xeroform is not desirable; too firm a crust is formed, which does not permit the secretion to percolate out.

The same precaution had to be observed with suppurating buboes after incision and with furuncles. The abscess cavities were covered with a thin layer of xeroform, and then packed with xeroform or simple sterilized gauze. In the tuberculous ulcerations this did better than any other dressing; the torpid, flabby granulations became firm; they lost their oedematous appearance and so were prepared for more rapid cicatrization.

Xeroform seemed to do best, however, in the wide spread inflammatory affections of the skin accompanied with hypersecretion, especially in balanitis. It was better than the salicylic powders in that it has no cauterant action, and yet diminished the secretion, removed the obnoxious odor, and rendered the formation of normal epidermis possible. In erosions of the genitals its advantages were equally marked.

Xeroform was equally beneficial in the moist eczemas when these are circumscribed, as on the hands. This is of especial importance; for in public practice this variety of the disease is very troublesome to the physician. He will welcome a remedy that causes a rapid diminution of the secretion and renders the use

of ointments possible. Ehrmann formerly employed a 20 per cent. nitrate of silver solution for that purpose; this was not always agreeable to the patient, who welcomed the substitution of xeroform.

Among the local eczemas for which xeroform seemed especially suited were those of the anus and surrounding regions, more especially because its external application as a dusting powder can be combined with its internal administration.

Acting on the suggestion of Hueppe, who employed xeroform as an intestinal antiseptic in cholera with great advantage, the author administered xeroform in several dermatoses that are notoriously accompanied with increased decomposition of the intestinal contents.

The obstinacy of anal eczema is due to the fact that its cause is the abnormal composition of the contents of the intestine that pass out. All individuals affected with it have either habitual constipation, or intestinal atony, or suffer from flatulence. From remaining too long in the intestinal canal the feces are ash-grey in color, or they have an unusually penetrating smell. Other cases have alternately constipation and diarrhoeal stools. In none of these cases can any permanent result be obtained without a suitable treatment of the gastro-intestinal tract. This treatment varies, of course, in every case; regulation of the diet, of the habits of life, of exercise, with abdominal massage, gymnastics, etc., are required; but intestinal disinfection is indicated in all cases. The author formerly employed ichthyol, creosote and menthol for that purpose, but he was glad to replace them by xeroform which has no unpleasant odor or taste, and causes no eructations. He administered the drug in doses of 0.5 gram ($7\frac{1}{2}$ grains) in wafers two to four times a day; and he found that it always effected a diminution of the flatulency, greater regularity of the intestinal evacuations, and an improvement in the condition of the feces. He gave thirteen cases of anal eczema xeroform internally; in two cases only the constipation remained obstinate, though the flatulence diminished. He, therefore, had recourse to irriga-

tions, abdominal massage, and *cascara sagrada*. The anal eczemas were cured by the internal and external use of xeroform.

A second group of dermatoses in which an intestinal antiseptic is of importance are the chronic urticarias and dermatographism.

A certain number of urticaria patients complain spontaneously of constipation, and for them purgatives, administered for a sufficient length of time, are enough. A much larger number, more especially those affected with dermatographism, have normal and satisfactory stools. Yet there is not the least doubt that in these cases also are cases of auto-infection from the intestinal canal, as is proven by the results of treatment.

In some of these cases the usual intestinal antiseptics, salicylate of soda, ichthyol, creosote, menthol, give no results; in two such cases, Ehrmann employed xeroform with success and now he always commences the treatment with it. Of the 32 cases of urticaria and dermatographism that he has treated during the past year, 23 were cured, 7 were improved and disappeared before treatment was concluded. Two cases that have suffered from urticaria for two and four years respectively, are still under treatment. This is a result that leaves all the other intestinal disinfectants in the shade.

Finally, Ehrmann comes to the conclusion that xeroform is one of our best and most reliable antiseptics and skin dressings; that its desiccating properties can be used to great advantage in dermatotherapy; and that in anal eczemas and autotoxic dermatoses it is the best of all the intestinal antiseptics.

INJECTION FOR BLENNORRHEA.—

R Gallolbromol, gr. 45.

Distilled aq.,

Glycerin, aa fl. $\frac{3}{4}$.

Use as an injection.—*Jour. de Méd. de Paris*.

AMENORRHEA—

R Apiol. crystallis, 20.

Olei steril., q. s. ad 100.

Sig. One to two syringefuls daily.—*Roussel, Med. Rec.*

THREATENED ABORTION.

BY JOHN S. MOREMAN, M. D.,
LOUISVILLE, KY.

Obstetrician to St. Ann's Maternity Hospital.

A VERY common accident to pregnant women is the occurrence of abortion. The causes which lead to the production of abortion are very plentiful and comprehend nervous excitement and injuries and accidents of various kinds. It is of the utmost advantage to the patient to prevent the occurrence of abortion and thus save the life of the unborn, and also protect the patient against dangers incident upon abortion. We are not fully abreast with the times if we underestimate the importance of abortion as an indirect as well as a direct cause of a large amount of mortality. Abortion is produced by professionals and from their work we are constantly called to see a large number of cases of peritonitis from this cause. Of course, the limits of this paper have nothing to do with criminal abortion in any way and reference to it above was only for the purpose of showing a dire result traceable to it, that will also be seen resulting from abortion when due to causes far removed from that of a criminal intention. When we are called to see a patient who is pregnant and has regular pains in the region of the uterus, whether there is hemorrhage or not, we must lose no time in bringing about a cessation of these pains. When there has been hemorrhage, we must not be discouraged, since Playfair and other good obstetrical observers, testify that even after this has been considerable, we shall often be successful in quieting the pains of the patient, and the patient will go on to a full term. Not common is it to see these patients get along well after the hemorrhage has been considerable.

When hemorrhage is small and the uteri is not dilated we may, by instituting prompt and effective treatment, bring the patient around to a safe point. It is of the first importance for the obstetrician to make a vaginal examination to ascertain the exact conditions that exist in every case. If upon examination the dilatation is found to be extreme,

and there is no reasonable hope of the patient being spared of abortion, then measures should be instituted that will speedily deliver the patient, and in this allow her to escape the danger of probable excessive hemorrhages and probable death. The first thing to be done toward the prevention of abortion is to secure for the patient absolute rest and quiet. The assumption of the recumbent position is an absolute necessity in all cases. The patient should undress and occupy a comfortable position in the bed. In cases where pains are produced by excitement or fright this will often be sufficient to bring about a cessation of the pains, but this alone cannot be depended upon, and the writer does not desire to recommend it. It is necessary to give an agent which acts not only as an uterine sedative but also as a quieting agent to the general nervous system. When we speak of the necessity of rest, it should be borne in mind by the obstetrician that the patient must be comfortable in the bed. She must not have too many bed quilts put over her, for these will prove burdensome and aggravating. The patient must not be allowed to get up on the chamber to go to stool or empty her bladder. These acts frequently undo all that we have accomplished up to this time. In a word, no exercise must be allowed. The bed pan will prevent much exertion that would otherwise be necessary in these cases. The diet taken by these patients must be very light and never should the patient be allowed to eat very stimulating food or fill her stomach with food which is hard to digest. When the patient is first seen and the pains are coming with regularity, the administration of a hypodermic injection of morphine may be made with advantage. When, however, the patient is very susceptible to pain, as some extremely nervous women are, this is to be avoided as it will very often so excite the patient that she will be made worse. To give it by the mouth it should be given with five grains of oxalate of cerium to overcome the nauseating tendency of morphine. No more than one dose of morphine should be given except in extraordinary cases. After the first dose, the

best remedy that can be given to prevent a further continuance of these pains is aletris cordial. It often happens that we will get relief in a very short period of time. Not infrequently does it happen that relief follows a third or fourth dose and attack is entirely brought to a successful termination. There should be given no opium to any patient if that can be avoided. Urgency of pains only demands it, but when the pains are not intense, reliance should be placed upon putting the patient to bed and giving aletris cordial.

Aletris cordial was first brought to my notice on account of its value in amenorrhœa and dysmenorrhœa, but I find for it a wider sphere of usefulness.

EXHIBITION OF INFECTED APPENDICES.

BY ROBT. T. MORRIS, M. D.,
NEW YORK.

Meeting of Danbury Medical Society, Dec. 21, 1898.

SPECIMEN 1. A normal appendix with an opening cut in the side to show structure.

SPECIMEN 2. First stage of infection. Mucosa and adenoid layers swollen to point of auto-compression by infiltrates. Muscular tube not yet yielding.

SPECIMEN 3. Same as 2, cross cut to show obliteration of visible lumen by swelling of inner structures.

SPECIMEN 4. Round ulcer of inner coat caused by occlusion of a branch of the artery of the mesappendix. Occlusion of artery due to proliferative endarteritis caused by toxins of local infection.

SPECIMEN 5. Acute ulceration of whole mucosa from direct toxic destruction of cells.

SPECIMEN 6. Chronic ulceration of whole mucosa due to presence of fecal concretions.

SPECIMEN 7. Perforation at tip. Three escaped concretions.

SPECIMEN 8. Multiple perforations due to mucous inclusion.

SPECIMEN 9. Acute mucous inclusion. Lumen closed at proximal end and appendix transformed into a bag of pus.

SPECIMEN 10. Chronic mucous inclusion caused by scar constriction

following former acute ulceration of mucosa at one point.

SPECIMEN 11. Chronic mucous inclusion caused by three scar constrictions following acute attack.

SPECIMEN 12. Perforation into space between layers of mesappendix due to adhesions preventing escape of appendix contents elsewhere.

SPECIMEN 13. Appendix containing phosphatic and fatty concretion nearly as large as a hickory nut.

SPECIMEN 14. Appendix containing phosphatic concretions with sharp nodular excrescences.

SPECIMEN 15. Total gangrene of appendix six inches long.

SPECIMEN 16. Rhexis. All structures distended with blood from acute toxic destruction of capillaries.

SPECIMEN 17. Mucous inclusion by sharp adhesion angulation of appendix.

SPECIMEN 18. Perforation at tip walled in with large mass of lymph.

SPECIMEN 19. Mucosa undergoing destruction caused by presence of oxyuris.

SPECIMEN 20. Mucous inclusion in portion of appendix severed from stump by previous gangrene of intervening segments. Stump healed.

SPECIMEN 21. Tip of appendix remaining and nourished by adhesion circulation after destruction of remainder of appendix.

SPECIMEN 22. Great hypertrophy of all structures of appendix, due to chronic infection.

SPECIMEN 23. A series of cross sections of infected appendices showing progressive stages of destruction of different coats.

REMARKS. Hard concretions are found in about 12 per cent. of cases operated upon for appendicitis.

Hard or soft concretions, or both, are found in about 20 per cent. of operated cases.

Mucous inclusions are found in more than 80 per cent. of operated cases in which the patient has had one or more acute attacks of appendicitis.

Cases with hard or soft concretions or with mucous inclusions are cases for recurrence of acute attacks of appendicitis from time to time. None of these conditions are curable by medical treatment, although a large proportion of acute exacerbations are

more or less amenable to medical treatment. No one can foretell when a mucous inclusion is to rupture, or when a concretion is to escape through the appendix walls.

The condition of the appendix proper cannot readily be determined before operation in acute cases. The condition of the appendix proper can usually be determined very satisfactorily by expert palpation in the interval between acute exacerbations.

THE TREATMENT OF AMBULATORY GYNÆCOLOGICAL CASES.

BY DENSLOW LEWIS, M. D.

Professor of Gynecology in the Chicago Polyclinic, Consulting Obstetrician to the Florence Nightingale Home, Senior Advisory Gynecologist and Obstetrician to the Cook County Hospital, Chicago.

SANGER tells us that gynæcology is the surgery of the female genitalia. His definition is neither exact nor complete, but it is clinically useful. As a matter of fact the first thing to be determined in every gynæcological case is in reference to the advisability of operation. A necessary subdivision of the question is at once apparent. There is the consideration of immediate operation at the time of examination, the operation in such cases being trivial. There is to be considered the advisability of local systemic treatment, which is often to a great extent tentative, with the reasonable hope that surgical treatment may ultimately be dispensed with or may become relatively insignificant,—at least not especially dangerous—and finally there is, in some cases, the certainty that operative measures are imperative, perhaps that their immediate adoption is the only known means of relief or of saving life, in which event removal of the patient to a hospital is usually indicated. There is, therefore, in the first examination of every gynæcological patient a chance for much difference of opinion, both as regards the indications for operation, the kind and extent of surgical measures to be adopted, as well as to the relative value of measures, chiefly medicinal and topical in character, which include no extensive surgical interference.

I desire in this connection to refer to the gynæcological cases I have seen at the Chicago Polyclinic during the past four years. I ask your attention exclusively to those cases, very properly designated as ambulatory, where the women, although often seriously diseased or suffering from a condition which seems to demand some surgical treatment, are unable to submit to any radical measures which would necessitate sojourn in a hospital or cause them to give up their daily work.

These patients are chiefly working women, many of them having to support children and at times a husband. If not employed in some shop or factory they are obliged to attend to household duties from which they cannot absent themselves without serious interference with this routine of their family life. In some instances they are impostors. I have known them to come several thousand miles for treatment. They have settled down in Chicago with their families and have taken advantage of our dispensary and hospital facilities in the most shame-faced manner. Prostitutes are not frequent attendants at our gynæcological dispensary. The women, as I have said, are, as a rule, obliged to work for a living. They are often poor but not destitute. They are, most of them, trying to do their part in the struggle of life. For this reason it is a hardship in several ways for them to remain in the hospital long enough to convalesce from an operation. They cannot indulge in the "rest cure" or, in many instances, purchase proper food. They seek relief from their ailments without interference with the routine of their daily life.

It is gratifying for me to be able to say that often such a course of treatment is practicable and sometimes surprisingly successful. Let me briefly detail the methods in use in the different classes of cases I have been called upon to treat:

Venereal warts if small are snipped off with scissors under cocaine anæsthesia. Occasionally the base is touched with a drop of carbolic acid. If the warts are large and extensive the patient goes to the hospital for a few days, the strip of mucous membrane from which they grow is dis-

sected off and the edges united very much as in a Whitehead operation for hæmorrhoids. During pregnancy no operation has been undertaken nor have the warts, as far as known, in any way interfered with parturition. During the puerperium they diminished in size and in some cases they have disappeared.

Chancroids are touched with strong carbolic acid for its anæsthetic effect, followed by a drop of fuming nitric acid applied with a glass rod. Powdered boracic acid is applied to suppurating surfaces after the parts have been cleansed with a boracic acid solution and dried with absorbent cotton. No case of phagedæna occurred.

Chancres were not often seen. They occurred on the fourchette and inner surface of the labia majora. They were dusted with boracic acid and pills of proto-iodide of mercury were exhibited.

Condylomata have been dusted with powdered boracic acid or stearate or oleate of zinc. A douche, often of a 1-4000 solution of bi-chloride of mercury, would be given two or three times a day and general cleanliness of the parts would be insisted upon. With these local measures under a vigorous mixed treatment, the condylomata would disappear or perceptibly diminish in size and the ulcerative condition of the neighboring parts would improve.

Pruritus, in connection with pathological conditions would often be relieved by applications of powdered boracic acid and the maintenance of cleanliness. In other cases a saturated solution of sulphate of sodium would be prescribed with great benefit although in some cases of pregnancy its use would have to be persisted in.

Lacerations of the perineum would often present themselves but usually cicatrization had taken place and no serious discomfort was occasioned by their presence. In recent cases powdered boracic acid would insure healing without much pus. Where extensive rectocele existed the patient was advised to submit to a Hegar operation in the hospital. In many instances, circumstances prevented the acceptance of this advice and it was found, in the great majority of cases, that when the patient, in the

course of time, recovered from pelvic pain and other symptoms due to infection of some of the pelvic viscera, the rectocele apparently caused but little inconvenience as long as the bowels acted daily.

Cases of somewhat extensive laceration of the anterior vaginal wall would favor the development of a cystocele, but in many cases without appreciable inconvenience. Here also it was noted that when the symptoms due to infection were relieved the cystocele would persist but it would cause—at least while the patient was under observation—no decided bladder symptoms.

Many cases were observed of what is commonly called "irritation of the neck of the bladder." The symptoms were undue frequency in urination and a desire to pass a drop more accompanied by more or less pain. Urethral carbuncle when observed in connection with these symptoms was promptly removed under cocaine anæsthesia. In addition to the routine treatment of infection of the pelvic contents, to be later described, it was customary to recommend the copious drinking of water and the exhibition of twenty grains of benzoate of sodium three or four times a day. Only exceptionally would it be necessary to give an anodyne. When pain was severe it would usually be relieved by a suppository of one-half grain of the aqueous extract of opium, often combined with one-third grain of the alcoholic extract of belladonna. Once or twice a year there would be a case of chronic urethritis, which would disappear under the foregoing treatment and the bi-weekly passage of steel male sounds gradually increasing in size, as is practiced in the treatment of urethral stricture in the male. Rarely was it necessary to send the patient to the hospital for bladder irrigation, ureteral exploration or some operative procedure.

Infection of the vulvo-vaginal glands, one or both, was often observed. In many instances no special discomfort was occasioned, and in the course of time the infection would subside. In other instances pus had formed so that a free incision was necessary. Several cases were seen that had persisted for

years. It was noted that a small incision, amounting to little more than a puncture, had been repeatedly made, which would allow the evacuation of pus, but the abscess would invariably recur. In such cases it was gratifying to observe that an incision which extended throughout the length of the gland would invariably affect a cure within a few days. Some chronic cases where induration was apparent were sent to the hospital and operated on by excision of the glands.

Hemorrhoids were often seen in connection with other diseased conditions. If external, and especially if situated some distance from the verge of the anus, they were incised and the clot turned out. In other cases an ointment of equal parts of ungt. gallæ and ungt. zinci. benzoat, containing perhaps ten grains of extract of opium to the ounce would reduce the tumors in size and relieve the itching and irritability complained of. Of course means were adopted to secure free bowel movements in each case.

Internal hemorrhoids and anal fissure were treated by moderately stretching the sphincter muscle and applying powdered boracic acid twice a week. Of course here also fresh catharsis was secured. It was found that these measures were usually sufficient to heal the fissure, reduce the hemorrhoids to an appreciable extent, and to relieve all symptoms due to their presence.

Leucorrhœa, as would be expected, was a symptom frequently observed. Indeed, its presence often induced the patient to apply for treatment. She would suffer also from variable pelvic pain, but, in many cases, the constant discharge was so disagreeable, or its continuance was regarded as such a drain on the system, that immediate and permanent relief was urgently demanded.

When the discharge was at all profuse or the attack was recent the gonococcus would be looked for. A drop or two of the pus would be collected on a glass slide; methyl blue or gentian violet would be used as a staining material and the specimen would be examined microscopically. If diplococci were found Gram's or iodine solution would serve to

differentiate the gonococcus by decoloring it. Usually it was found where the discharge was profuse, unless a recent infection of the endometrium or a cervical laceration was clearly demonstrable. Vaginitis was rare except in children. Here it was the rule in nearly all cases of leucorrhœa, the delicate character of the mucous membrane apparently offsetting the protection afforded in adults by the pavement epithelium. The treatment of gonorrhœa and of the vaginitis of children consisted in the application of a nitrate of silver solution to the mucous membrane of the vulva, the entire surface of the vagina, the portio vaginalis and the exposed portion of the interior of the cervix. In adults this application consisted of a 20 grain to the ounce solution, and was made with a swab of absorbent cotton at intervals of three days. A 1-4000 bichloride douche, used twice a day, would also be prescribed. In children the application was necessarily less thorough. It was made in the same manner to the vulva and lower portion of the vagina, but in addition a vaginal injection of the solution, 10 grains to the ounce, would be made by means of an eye syringe.

In most of the cases that presented themselves for treatment there was evidence of infection of a cervical laceration, the endometrium, the lymphatics or veins near the uterus, the interior of the tubes, the ovaries, or the peritoneum adjacent to the fimbriated extremities. These cases constituted the conditions often called "cellulitis," "perimetritis" or "parametritis." By me these terms are no longer used. They present to my mind no definite idea of the exact pathological condition that exists nor are they in any way indicative of etiological relationship nor suggestive of suitable means of treatment. I also abstain from the use of the words "endometritis," "salpingitis" and "ovaritis." These expressions, it must be admitted, indicate very often the true condition that exists, but with our latter day knowledge of bacteriology, we understand that the inflammatory reaction that occurs when infection takes place, is the effect of microbic action and is always the result of a morbid process, which

is itself usually of the first importance.

I have no wish to be pedantic, at the same time I contend that for many reasons, it is preferable to say infection of the endometrium or tube, as the case may be. This defines the exact condition. This is a step in the right direction. It will not be long before the variety of infection will be stated, with very great value to our knowledge of definite therapeutics. The effects of the inflammatory reaction must also be recognized and appreciated. Indeed in many of these cases, the extent of the inflammation is of itself a positive indication for determining the proper course of treatment.

Lacerations of the cervix were often noted. Sometimes there would be no infection. The finger could detect a solution of continuity in the portio vaginalis but no other symptoms, subjective or objective, could be determined. In such cases the lacerations were let alone. In other cases the infection was the factor of importance. The portio vaginalis torn bilaterally or presenting an irregularly stellate laceration, would be everted and hypertrophied, the red and inflamed surface of the endocervical mucous membrane constituting the condition which used to be called "ulceration of the womb." In all such cases there was found an extension of the infection to the endometrial mucous membrane or beyond. Repair of the lacerations or amputation of the cervix together with a thorough curetting was usually recommended, but in most instances, sociological and economic reasons prevented the acceptance of this advice. Under these conditions powdered boracic acid was applied and the routine treatment, soon to be described, was persisted in, usually with satisfactory result.

I may as well state frankly that our diagnosis was often imperfect and incomplete in many of the cases where infection originating in the endometrium, had extended either by continuity of epithelial surface through the tube to the ovary or to the peritoneum or where invasion had occurred through veins or lymphatics—often of the placental site to the parenchyma of the uterus or the

surrounding areolar tissue. It must be remembered that we encountered stout patients and those in whom there was much muscular rigidity or extreme tenderness. The bimanual examination was often facilitated by the assumption of the exaggerated lithotomy position and the use of a vulcella forceps, but these means were not always sufficient to enable us to map out the pelvic contents with any degree of accuracy and it was rarely practicable for our patients to take an anæsthetic.

Under these conditions the presence of infection could be noted but the locations infected could not be accurately determined until the patient had become accustomed to our examination or the tenderness had appreciably subsided. As a matter of fact, as I often took occasion to say to the practitioners who attend our clinic, the etiological relationship and the location of the infection are relatively of little consequence in comparison with the importance of knowing its extent; that is, if it has gone on to suppuration. The presence of pus in the pelvis is, in my judgment, the important point to be determined in the examination of gynecological cases showing the effects of infection. When pus has formed to any great extent its evacuation is usually the proper treatment. In our patients, however, it was often impossible to operate and our advice had to be disregarded. It is extremely gratifying to be able to say that in the great majority of cases where pus was diagnosed in the tube or the areolar tissue of the broad ligament our treatment would succeed in relieving all pain and all discomfort so that the patient became symptomatically well.

This experience in time modified our prognosis and had its effect upon our advice. When a pyo-salpinx was discovered we did not feel it necessary to demand an immediate celiotomy as the only means of saving life. When pus was diagnosed in connection with the ovary or broad ligament we insisted that the surest and speediest way to ensure recovery was a vaginal incision and drainage as Henrotin has so ably pointed out. Nevertheless we soon learned that if circumstances prevented a sojourn

in the hospital and operative interference, there was a reasonable probability that in the course of time microbic action would cease, the pus now no longer septic, would become absorbed or encapsulated and the patient would be free from pain and discomfort.

We learned further that our routine treatment was beneficial in all cases of infection of the pelvic organs or the tissues surrounding them. As a matter of practice we submitted all patients of this class to essentially the same treatment. We succeeded in all cases except those requiring surgical interference and in many of these cases when we advised vaginal or abdominal incision for the evacuation of pus, curetting for the removal of granulations or the retention of membranes following abortion or labor, trachelorrhaphy or some form of colporrhaphy it was most surprising to notice that the symptoms would gradually subside and the patients would be able to continue their daily occupations without inconvenience.

I will now state the details of what I have called our routine treatment. I do not claim that it is the best treatment, much less that it is the only treatment for this class of cases. In our hands it has been found convenient and many hundreds of poor women can testify as to its success. I consider it worthy of mention, although there is nothing new about it, for it must be remembered that the patients who were benefited were working women unable to purchase expensive drugs, food or appliances and forced to continue on in their daily routine of life.

Our first direction is a 1-4000 bichloride of mercury douche to be taken as hot as can be borne twice daily, with the patient on her back and the hips up. The error is explained of an attempt to take such a douche with a bulb syringe or on the water closet seat. The patient lies flat on her back in the bath tub with a rubber water bag under her hips, or, as often happens, if there is no bath tub, she lies on the edge of the bed with her feet separated each on a chair.

Her bowels are made to act freely once a day. For this purpose it is

customary to prescribe the fluid extract of cascara sagrada in a routine manner. For many years I have obtained the best results from the preparation of Parke, Davis & Co. The drug is given at first in twenty drop doses to be taken three times a day. If the bowels do not move, a compound cathartic pill is given at night and a dose of salts in the morning. Sometimes it is necessary to give at first a saline enema or one of glycerine and water. However this may be, no more than twenty drops of the cascara are given at a dose.

In a few days the salts may usually be omitted in the morning, and some days later the pill at night is also omitted, to be promptly resumed, however, if on any day the bowels fail to move. It is usually found that, after a week's time, the three daily doses of cascara produce daily evacuations. Our directions now are that the drug be taken regularly in the same dose, no matter how frequent the discharge may be, provided they are fecal in character. It is noted that after the cascara has been taken some little time, colicky pain and diarrhoeal movements supervene. This is our signal, not for stopping the medicine, but for its exhibition in the same way three times a day in a smaller dose, say 15 drops instead of 20. Another period of regular bowel movement usually follows, but in the course of time there again occur watery movements and abdominal colic. Here again the dose is diminished, the original dose being promptly resumed, or the cathartic pill, enema or salts given if required. In a few weeks more the dose can often be still further reduced, although taken in the same regular manner three times a day. Finally, after the dose has been reduced to one drop three times a day, the medicine can be discontinued and the bowels act freely and regularly of their own accord.

The patient is told to assume the knee chest position twice a day for ten minutes. Twice a week when she calls at the dispensary, she assumes this position upon the operating table, a large Sims's speculum is introduced and a tampon of absorbent wool, one end soaked in a 10% solution of ichthyol in glycerine is

applied by means of a uterine dressing forceps. This tampon remains in situ some twenty-four hours, unless an offensive discharge or undue irritation ensues, and is removed by the patient by means of a string which is tied to one end of the tampon.

Now this is our routine treatment of infection of the pelvic contents. Powdered boracic acid is dusted on the inflamed cervix. Benzoate of sodium is given, as already stated, when there is irritation of the bladder. Quinia, iron and strychnia are often given with phosphoric acid. Some form of pepsin with hydrochloric acid is prescribed when there is stomachic indigestion. These drugs are invariably combined with cascara, even when the patient disclaims any tendency to constipation. Very rarely is it necessary to prescribe anything else. No uterine probe or sound is used in my clinic, nor is there ever made a uterine application. Our experience with pessaries has consisted solely in their removal. No uterine dilatation is practiced.

I hardly need say much in explanation of this plan of treatment. My purpose is to record facts, and not to attempt to defend a theory. Uterine dilatation is rarely, in my opinion, a justifiable procedure in an ambulatory patient. In the class of cases under consideration it would have been a dangerous experiment. For the same reason no application was made to the endometrium. My experience with hundreds of women during the past four years appears to show that it is unnecessary.

Some surprise may be occasioned by the absence of all reference to uterine displacements. It does not mean that they were not observed. They were usually found, however, in connection with pathological conditions which were themselves of chief importance. In the absence of fibromata of the uterus or cysts of the ovary or broad ligament, in the absence of ectopic gestation, hæmatoma or other condition which mechanically influenced the position of the uterus, displacement occurred as the sequel of infection or the inflammatory action that had ensued. With an infected puerperal uterus, with adhesions which matted the

parts together, it was evident that the infection was of the first importance, and it was usually found that when the infection was benefited by treatment, the uterine displacement disappeared or caused no inconvenience unless there were present conditions warranting operation.

For this reason the displacement of the infected uterus was practically disregarded. The mobility of the healthy uterus was explained to our practitioner-students by reference to well known facts concerning the anatomy of the parts, and by demonstration in patients free from infection. The presence of infection was pointed out both in reference to its etiological relationship to the displacement and its importance as an object of attack in our treatment.

The symptoms complained of were very much alike wherever there was infection which had extended much. There was pelvic pain and a "bearing down" sensation usually increased during menstruation. There were often bladder symptoms due to pressure, or to an amount of infection which showed itself by no objective symptoms. There was lumbo-sacral, as well as inguinal pain, and there was often pain extending down the inner surfaces of the legs. There were reflex symptoms in great numbers and in varied character.

It was our constant endeavor to secure an accurate record of all these symptoms. Our history also included a full description of all objective symptoms, which were described as the "result of physical examination." For instance, under this head, the record would show "solid, movable tumor, oval in shape, apparently two inches in length, in cul-de-sac," also, in the same case, "no tube or ovary palpated in left ovarian region," and under the head of diagnosis we would insert "prolapse of inflamed left ovary." These facts are mentioned, for it is evident that the diagnosis, which is the deduction from the premises presented, may often be inaccurate, whereas the record of symptoms complained of and of physical findings is apt to be reasonably correct, provided the observer exercises proper care in the interrogation of the patient and is experienced in his examination.

In cases presenting the usual symptoms of infection, together with leucorrhœa, uterine tenderness and sometimes enlargement as well, our diagnosis of the infection referred especially to the endometrium. Where infection of a cervical laceration was evident it was assumed that extension by epithelial continuity had taken place, unless it was at the same time apparent that some traumatism was present, or that retention of membranes or placental remnants had occurred. Curetting was advised in these cases when menorrhagia or metrorrhagia persisted, when offensive leucorrhœa occurred as a sequel of labor or abortion, or when the chronic character of the infection and the continuance of the leucorrhœa gave reason to believe that granulations had resulted. Curetting was not advised in cases which showed an extension of the infection beyond the endometrium. When pus was present anywhere in the pelvis its evacuation was considered rational, and it was found that subsequently our routine treatment in time controlled the infection of the endometrium. When congestion and other evidence of phagocytosis were noticed beyond the endometrium it was deemed judicious to persist in local treatment until the effects of infection were removed, or until the formation of pus had become a certainty. Especially in extension to the mucous membrane of the tube was it considered advisable to defer a curetting because the probability of a reinfection of the endometrium was a danger which our experience taught us to be imminent. Indeed, in several cases where both tubes had been removed, it was observed that the infection of the endometrium still continued and gave rise to symptoms scarcely less severe than those which were noted prior to the operation.

Many of the cases where operative interference was advised, and where circumstances prevented the acceptance of our advice were, after all, forced to submit to hospital treatment owing to subsequent pus formation or the development of other serious sequelæ. Nevertheless it must be stated that in a certain number of cases, when in our judgment an operation was urgently demanded,

the symptoms, under our routine treatment, would gradually improve and finally disappear.

When a fluctuating tumor was felt outside of the uterus, the anamnesis and the concomitant symptoms would permit us to determine the presence of pus. Its immediate evacuation was recommended in all extra-peritoneal cases. The etiological differentiation was often difficult and at times impossible. We felt, however, that the important point to be determined was the relationship of the pus to the peritoneum. Whether the suppuration was the sequel of invasion through lymphatics or veins of vulva, vagina, cervix or uterus or had occurred by an extension through the tube to the ovary or the pelvic peritoneum was, in our judgment, of insignificant importance in comparison with the necessity of determining the feasibility of operating without danger to the peritoneum. In many cases where pus was diagnosed and in certain cases where its presence was demonstrated, it was observed that the swelling would subside, the pain would diminish, menstruation would become normal in character and the patient in time would be relieved of all symptoms.

Where pyo-salpinx was diagnosed an immediate operation was not usually advised. Our experience showed that quite often pus, in the course of time, would be evacuated through the uterus and all symptoms of infection would disappear. Many chronic indeterminate cases were observed. The excursion of the uterus would be restricted by adhesions. The infection would have persisted for years with irregular exacerbations. Pain, tenderness, leucorrhœa and menstrual derangement would be associated with various effects of infection. In these cases especially, our routine treatment would yield most satisfactory results. In all cases the subjective symptoms would in time disappear or suppuration would become localized so that proper surgical measures could be employed.

The record of these every day gynecological cases and the details of the simple treatment instituted, will be considered of but little value by gentlemen who see in every woman only a patient to be operated

on. I venture to hope, however, that it is not without interest for us to realize the possibility of relieving distressing symptoms, even in serious cases, when circumstances prevent hospital treatment. I consider it of importance for us to understand that patients can sometimes recover without curetting, uterine dilatation or the application of caustics to the endometrium. I think it well for us to know that lacerations of perineum, vagina and cervix do not always have to be closed. I regard it as a matter of interest to appreciate the fact that the day of the pessary has passed and that displacements are no longer of paramount importance. It is, moreover, satisfactory to note that even in cases where the consensus of opinion would pronounce unhesitatingly in favor of operation, it is occasionally possible for milder measures to succeed in the amelioration of symptoms, while the patient continues to follow her usual pursuits.

The inference from this observation is obvious. Infection is the factor of importance in most gynecological cases. Displacement, hypertrophy and hyperplasia are essentially the result of infection or the sequel of the consecutive inflammation. Infection is chiefly to be considered in the adaptation of our therapeutics. Indeed, in many cases no thought need be given to concomitant conditions. Caustics, astringents, scarifications and many ancient practices which prevailed when we sought to control inflammation are superseded by rational methods based upon an increasing knowledge of bacteriology.

INTESTINAL ANTISEPTIC.—

R Naphthol, gr. 45.

Chloroform, *m* 15.

Castor oil, $\frac{3}{4}$ 3.

Ess. of peppermint, gtt. 5.

M. Dose, tablespoonful in port wine, beer or hot and sweetened black coffee.—*De Maximovitch, The St. Louis Clinique.*

HEMORRHOIDS OF PREGNANCY.—

B Sulphur precipitated,

Cream of tartar, aa 3 j.

Da Costa, The St. Louis Clin.

CHRISTIAN SCIENCE. A SOCIOLOGICAL STUDY.

BY CHARLES A. L. REED, A. M., M. D.,
CINCINNATI, OHIO.

Read before the Northwestern Ohio Medical Society.

THE sociologist to-day finds much to engage his interest. The extension of civilization among peoples who never before have seen its gleam; the shifting of national lines under the expansive energy of a virile race; the decadence of once dominant peoples; the yielding of hereditary and imperialistic prerogative to the encroachments of popular government; the surrender of established interests to economic reforms; the mutations of political parties; the evolutions of science and the wide diffusions of humanitarianism—these are among the more striking changes that attract his attention and arouse his enthusiasm. But as he scans the field a little closer he discovers certain secondary phenomena, the constant recurrence of which through the ages not only emphasizes the persistence of original impulse, but reaffirms the law that like causes produce like effects under like circumstances. That the phenomena are secondary, that they sustain about the same relation to the total activities of life that the little intermediate waves sustain to the majestic surface of the rolling sea, does not argue against their intrinsic importance. Nothing that is unimportant. This truism bears a fresh emphasis when applied to those influences which, like those I shall consider, have a direct bearing upon the material welfare, the happiness and the life of individual man. It is to certain phenomena of this secondary class to which, in response to your kind invitation, I wish to call your attention to-night.

A SOCIOLOGICAL STUDY.

Those of us who enjoy more or less familiarity with the history of medicine, those of us who have given some study to the evolution of our humane science, cannot but be impressed with the manifest effects of certain erratic impulses, of certain aberrant forces. Thus, several years ago, a woman conceived the idea, or at least she says she did, that matter is

non-existent, and that all that is is mind or spirit. It followed, therefore, that as disease was a condition that related to matter and as matter was non-existent, there could be no such thing as disease. It was reduced to a demonstration, apparently satisfactory to the demonstrator, that that which people had been calling disease was in reality nothing but an erroneous belief in something that did not exist; and that all that was necessary to cure people of disease was to eradicate belief in its existence. To attain this desirable point all testimony of the senses was to be discredited and the alleged patient, who in reality was not ill at all, was to abandon himself to a vague, but none the less absolute, belief. This philosophy was labeled with the name of Christ—evidently because Christ never taught anything of the sort. A propaganda representing a large commercial interest was organized and—what do we now behold? Edifices are built for the propagation of the cult; assemblages are held to intensify its enthusiasm; printing presses are kept busy and thousands upon thousands are subjecting themselves to the life-and-death test of its efficiency. With them this strange philosophy represents all the possibilities of cure and, in their eyes, those who seek to relieve human suffering by any other agencies are transgressors of the laws of God and man.

An unknown and ignorant physician in an obscure hamlet somewhere west of the Mississippi River started another philosophy. He taught not that disease was not a reality, but that it was very real and that all disease was due to some deformity or to some displacement of one or more bones of the body. The cure, very logically, consisted in correcting the condition or the position of the offending bone. This was generally found in the spinal column in the region of the neck, although the collar bone and the breast bone and the ribs and once in a while a long bone have been accused of producing the mischief. A long course of massage at so much per seance is enjoined. Of course, it is all very absurd and very transparent, but we behold disciples flocking in great numbers to

the village for instruction and paying enormous prices for their tutelage; we see the clientele of these peculiar "paths" embracing people of education and distinction; we find their practitioners crowding into the legislative halls asking for, and in some instances receiving, special legislative license; and we observe them standing in open defiance of laws which society has enacted for its own protection against ignorance and incompetency in the practice of medicine. These are among the social phenomena that we are called upon to consider. These and many others of the same class—some theurgic, some otherwise—are sufficient for my purpose, which is to inquire into the genesis of these strange doctrines, to examine somewhat their merits, to take into account what they are doing and, if possible, to determine their proper status. Many people are interested in these questions, people, some of them ordinarily intelligent, the most of them moral and all of them deeply religious. They are manifestly honest in their convictions. If they are entitled to recognition as legitimate healers of the sick, it should be freely accorded them; if they, in their professional capacity, are entitled to the protection of the law, it should be given them, and if they are indeed the harbingers of a new and better era, their names should be enshrined among the benefactors of humanity. And let me urge that the same justice should be meted unto the practitioners of allied isms—the "faith curers," the "natural bone setters," the "hypnotists," the "mesmerists," the "Zionists," the "clairvoyants"—for before I leave this platform I shall show the absolute unity of all these "pathies," "isms" and "schisms."

THE "SCIENCE" OF CHRISTIAN SCIENCE.

In approaching so serious an undertaking it is important that we shall go to the very fountain head for our knowledge. The inspiration of the "Christian Science" cult is derived from a book written by the discoverer of the alleged secret, a work which has gone through many editions. Mine is the fifty-fourth, in the preface of which we are informed

that other books on the subject are "incorrect in principle and filled with plagiarisms" from this great first book of the science. It seems that the divine origin of this philosophy is no guarantee against the mendacity of its disciples. At this, however, we are not permitted long to wonder for at the foot of page 10 we are informed that "no intellectual proficiency is requisite in the learner," and morality without intellect enough to comprehend its laws is hardly to be expected. Indeed, it would seem that the inspired discoverer of this new science is inclined to subject the laws of morality to as radical a revision as has been visited upon those governing matter, for we are somewhat naïvely informed that, while Christian Science is not medical science, yet the first school organized for the propagation of its tenets was an "institution chartered for medical purposes." But then we are told that the author has "discovered," according to Scriptures, that God alone is true "and every man a liar," on which ground, of course, we may excuse the little discrepancy involved in falsely swearing to a petition for chartering a non-medical school as an institution for medical purposes. But we must not be too critical, as a then existing peculiarity of the statutes was frankly pleaded as a justification of what harsh people might have designated as perjury. The school having become established, no other schools of the purpose were chartered, and as 'Christian Science is indivisible,' and there, therefore, can be but one method on its teaching, it became essential that those who were seeking this great new truth should patronize the only school on earth. As the first seven years brought four thousand students to the enterprising incorporator of a non-medical school chartered for medical purposes, it would seem that the enterprise was reasonably profitable.

It is, of course, very interesting, not to say important, to know just what philosophy proved such a magnet to the seekers after truth and a soft job. Happily, the whole science, so we are informed by its "discoverer," is embraced in four propositions as follows: "1. God is all. 2. God is

good. 3. God, spirit, being all, nothing is matter. 4. Life, good, God omnipotent, deny death, evil, sin, disease—disease, sin, evil, death deny, omnipotent God, good, life." The elucidation of these primary postulates certainly leads us into the realm of the mystic. We are inclined to find fault with our author for being responsible for some of our confusion. Thus, in speaking in the preface (page x) of the plagiarized works, we are told that "they regard human mind as a healing agent; whereas this mind is not a factor in the principle of Christian Science." Yet in the body of the book, in the very first chapter (page 8) we are solemnly informed that "Christian Science explains all cause and effect as mental, not physical." But our confusion is not in the least lessened when she tells us, in one place, [that she calls "sick and sinful humanity mortal mind," and in the very next paragraph assures us that, "as mind is immortal, the phrase mortal mind implies something untrue and unreal." Then why did you get up such a phrase? Just here we come across a very ingenious arrangement of the "philosophy." Of course, when one is confronted with the proposition that "matter is non-existent," "matter is nothing," one is very inclined to protest that one can see and feel and taste matter; but our wily, synthetic meta-physician anticipates the criticism. We are told that the "testimony of the senses" is always false; [in other words, one knows nothing of things by hearing, seeing, tasting or smelling them. We are, of course, in no condition to combat the postulate, because the testimony on which we would controvert it, being received through the senses, is false. We are given a striking illustration to confirm this view. We are reminded of the primitive impression that "the sun seems moving from east to west, instead of the earth from west to east," an impression arising from "the false testimony of the eyes," but "corrected by clearer views of everlasting facts." Of course, the observation is very conclusive, yet we might have been a little more content in the conviction forced upon us if we had been informed how these "clearer views"

could have become possible had it not been for "eyes," or how the science of astronomy could have become developed by an eyeless humanity.

THE NOTHINGNESS OF THINGS.

Now along this same line we come almost immediately upon another rude shock to our preconceptions. I had supposed that the science of optics was tolerably exact, but we are informed that "the optical focus is another proof of the illusion of the material sense," and in proof of it we are told that "the barometer—that little prophet of storm and sunshine—denying the testimony of the senses, points to fair weather in the midst of murky clouds and drenching rain." But if the optical focus is an illusion, if the testimony of the sense of sight is false, how are we to know that we read the barometer aright? Then, too, the barometer is made of glass and mercury or some other material, which we benighted people speak of as matter, which, according to a primary postulate of this extraordinary science, is non-existent. Now if matter is non-existent it follows as day the night that that which is made of matter is equally non-existent. Therefore by no possible chance can there be such a thing as a barometer to read, and, indeed, if we carry the science a little further, and acknowledge the nothingness of things in general, how can there be even clouds or sunshine or drenching rain? As my man servant exclaimed after I had read to him the paragraphs upon which these criticisms are based: "Fo' de Lord, des jes' won' be nothin' nowhar!"

The "scientific" program mapped out under this change from the thingness of things to the nothingness of everything is very interesting and comprehensive. We are solemnly informed (page 19) that "the seasons will come and go, with changes of time and tide, cold and heat, latitude and longitude," and then we are told that "the agriculturist will find these changes cannot affect his crops in seed time or harvest." By this token, my farmer friends of the frozen north, you will find December an excellent

month for planting corn, while you may pluck the ripened strawberries from the snowy fields for your Christmas dinner! But there are still greater wonders in store: "The mariner will find himself having dominion over the atmosphere and the great deep, over the fish of the sea and the fowls of the air." What a splendid arrangement! How we shall enjoy ourselves in that happy day as we scud across the ocean behind a tandem team of fine domesticated whales! In that happy day each of us, like a loyal patriot, shall make his aerial flight astride our National bird! With our army mounted on American eagles, how easily shall we find the government of the Philippines! But in that happy day "the astronomer will no longer look up at the stars, but he will look out from them upon the universe." Let me assure you, right here and now, that so soon as I can get a little time I shall exercise my privilege as a Director of the University of Cincinnati, and visit the observatory of that institution, for the purpose of looking all the stars over and selecting one to my liking. My present impression is that I shall select Mars as the pleasant nebula of nothing on which I shall place my noncorporeal self for the purpose of "looking out upon the universe," which, being composed of non-existent matter, is itself non-existent. Now don't think I am proceeding upon a gratuitous assumption, for the very next paragraph assures us that "matter will be finally proven" (how cruel to split that infinitive—and in Boston, too)—"matter will be finally proven to be nothing but a mortal illusion." Of course, as the stars are made up of matter, they, too, must be "mortal illusions." Now how is a fellow going to roost up in the skies, and "look out upon the universe," unless they furnish him something more substantial than a "mortal illusion" for an abiding place?

"SCIENCE" OF DIVINE HEALING.

Then there is the "Divine Healer," a schismatic branch of the Christian Science trunk. True, his formulæ are the same, his "hermetic" books, his prayers and his incantations the same, but the distinction is essential

in the interest of individuality—to say nothing of revenue. This is a Chicago product, and I have often wondered whether it was this specimen of the disinterested altruist that prompted one of his kind—a Mr. Lord—to go back to England and publish in a book that “from my first acquaintance of the American movement in 1886 I found that good Americans were sadly disconcerted by the ignorance and avarice to be found among its ‘leaders’... for it is easy to see the motives for which they are at work—one motive is money getting.”

This chap in Chicago, who seems to have found it convenient to leave almost every quarter of the world, and who classes doctors and drugs and devils all in a bunch, and ships them, with a through bill of lading to hell, is one of the most remarkable specimens of human disinterestedness it has ever been my fortune to read about. He prints his sermons in pamphlets and puts his picture in them and the advertisement of a most altruistic commercial enterprise on the fourth cover page. A little rearrangement of his phrases, placing some of them on the outside of it, may make his consistency a little more apparent. Thus, “Christ has come to his people”—“Within one block of the terminal station of the Illinois Central Railroad.” “The fountain of life is flowing still”—“Situated on the finest boulevard in Chicago.” “He is revealed as the fountain opened for sin and all uncleanness”—“Hot and cold water and porcelain baths in nearly all rooms.” “He hath clothed his church with these gifts of healing”—“All the comforts of a first class hotel.” “He hath anointed me to preach the Gospel to the poor”—“Terms will be forwarded upon application.” Further comment on this phase of religious healing is hardly necessary, and I simply cannot pause to take up the little subordinate fads that we see about us.

THE FADS OF OTHER AGES.

Let it not be thought that these fads are features of the present era only—that they belong to the present time. They have existed in all ages. If we pause for a moment to con-

sider their genesis we shall discover abundant reason why they should be constantly recurring as extraneous incidents in the development of intelligence, in the evolution of society. Certain conceptions of supernaturalism were, no doubt, the dominant features in the dawning intelligence of humanity. Man, discovering his own existence, found himself the plaything of forces of which he had no knowledge, save that their most tragic effects were manifested in his own dissolution. His primary impulse, that of self-preservation, prompted him to turn with gratitude to those forces which had brought him into existence and with dread to those which threatened to terminate a life which he had found pleasant. As the supreme manifestation of power to him had been made by beast or bird or man, he naturally associated these governing forces with some such created objects. Thus originated the various conceptions of deity. The further development and segregation of these conceptions is not to our purpose. It is sufficient that to these supernatural sources, man, in the infancy of his intelligence, turned for protection in his hour of danger. To what extent may the race yet be said to be in its swaddling clothes?

Thus the impulse of self-preservation became the parent of religion and medicine. From that day to this theurgic medicine—the medicine of supernaturalism—has been observable in all periods of civilization, and always most dominant in those intellects whose primary conceptions most nearly approximate the barbaric standard, or in those who are the victims of that over-education which is productive of a morbid subjectivity.

Medical mysticism dates from the time of Zoroaster. The Essenes, a sect of the Jews in Egypt, developed a system of medicine exclusively theurgic and exactly like the Christian Scientists of to-day; they had a book that served as their inspiration; it was called the “Book of Creation” (Sepher Jezirah), written by Acibah. Then there were the Cabalists, whose theurgic ideas embraced ten angels who emanated from the “Eternal God” and who took care of sick people upon special application.

Theurgic medicine was early manifested in Egypt. Over 6,000 years ago, under Thot, the Hermetic, books contained formulæ very like those which we to-day find in the books of various "scientists" and "healers." Here, for instance, is a prayer which was invoked only under the most serious of circumstances—a prayer which, no doubt, cost the devotee many measures of rice. Let me give it to you in full:

"May Isis heal me, as she healed Horus of all the ills inflicted upon him when Set slew his father, Osiris. Oh, Isis, thou great enchantress, free me, deliver me from all evil, bad and horrible things, from the god and goddess of evil, from the god and goddess of sickness and from the unclean demon who presses upon me, as thou didst loose and free thy son Horus."

The Persians had their *genii*; the Phœnicians their *cabiri*; the Hindustanese their *vaidyas*; the Tartars their shamans; the Scythians their *enares*; the people of Borneo and Sumatra their serpent charmers; the Zulus their rain doctors and *tnwalas*; these are among the examples of the earliest formation of the medical branch—uniformly theurgic—in the social segmentation of primitive peoples.

The ancient Indians were very like the Egyptians. Their medical practice was governed by four books of the veda, namely, the *rigveda*, the *yarurveda*, the *atharvaveda* and the *samaveda*, or those of hymns, prayers, incantations and songs. The earliest of the Chinese conceptions were in entire accord with those now promulgated at Lynn, Mass., if we eliminate from the latter the single element of the personality of Christ. The primitive Japanese even yet worship *Hotei*, or the god of health, and their practice of medicine is essentially theurgic, although not sacerdotal.

The Christian epoch was ushered in in the midst of medical superstitions. The miracles of healing during that epoch were but a repetition of miracles which had been practiced with equal efficiency for centuries before, and which have been practiced with equal efficiency from that day to this—"miracles" which, in the

clear light of the science of to-day are no longer to be recognized as mysterious or supernatural phenomena. The pure word of Christ's Gospel was immediately seized upon by those who sought by its aid to strengthen their mysticisms. A sort of theosophy or theocracy now came into the field with as pure a sample of divine healing as may now be found in Chicago, and in its philosophy theurgy cured by good demons; goety by evil ones and magic through the intervention of exalted spirits. Then came the Gnostics with their talismans and the alchemists with their mystic books, and the astrologers with their Arabic legends and celestial mysticisms.

From the days of Christ to the present this alleged newly discovered "science" has been in constant practice. The records of the British Museum show that Athanasius, Ambrose Chrysostom and Augustine recorded cases of the sort during the fourth century; Hilary and Jerome in the fifth; Gregory the Great, Augustine of Canterbury and Cyril in the sixth. The records of the dark ages are almost silent, although cures are reputed by so-called "false miracles," which were probably quite as "true" as any that preceded or followed them. The case of Catherine of Siena, who saved the life of Father Matthew, is as authentic as anything that came from that period, when records were made chiefly with reference to the suppression of all facts which did not reflect sacerdotal achievements. When the Reformation came we find the practice extant among the Moravians and the Waldenses who cured certain patients by prayer and by anointing with oil. Luther's care of Melancthon, who was a neurotic, has been given an importance which the recorded facts do not justify. From that day to the present, recorded instances of this Christian Science healing are continuous.

It were out of the question for me to trace here the devious windings of supernaturalism and mysticism in medicine through the intervening ages. The mesmerism of but a few decades ago was a far more extensive exhibition of superstition and credulity than that even of Christian Sci-

ence or osteopathy. Somnambulism, spiritualism and clairvoyance, as theurgic agencies, are but so many evidences of the persistence to-day of the barbaric conceptions of primitive peoples. The wonders of Lourdes, Treves, Marpingen and St. Anne are in precisely the same category.

RESULTS OF CHRISTIAN SCIENCE.

Are we to say that no results whatever of a beneficial character are realized under the ministrations of these various "fadists?" Are we to say that the Vedas, the Pastaphori, the Flagellantes, the Isopaths of other ages, had no recoveries under their ministration? Are we to deny that the lame go to Lourdes or to St. Anne's and come away without their crutches? To do so would be to deny the tendency of nature to recover from disease. On the contrary, so far as I may trust the unreliable testimony of my senses, I am disposed to believe that alleged cures do take place under these ministrations. I will go a step further and say that I do not believe that these cures depended entirely upon the unaided powers of vitality to recover from disease. I may startle you, indeed, when, orthodox surgeon that I am, I make the declaration that

THE GREAT CENTRAL TRUTH

In all this supernaturalism is to be found not in anything supernatural at all, but in an agency among the most potent known to medical science. I have seen it relieve pain more speedily than morphine; I have seen it induce sleep more quickly than chloroform; I have seen it take the sensibility from an eye more quickly than cocaine; I have done painful operations unconsciously to patients who were under its influence alone; I have seen it produce delirium as profound and as fantastic as that induced by hasheesh; I have seen it paralyze the will and enslave its victim. It has been, and is, the cloak for immorality; it has killed people and ruined families. So powerful is this agency that in France its employment has been placed under the ban of most restrictive legislation, while in America, to my knowledge, its public and indiscriminate administration has been inter-

dicted by more than one municipality. Take these alleged "sciences," "healings" and "pathics," tear from them the gauze of idiotic "metaphysics," the flummery of a weird mysticism, the robes of a hypocritical and impious sacerdotalism and there stands revealed the

POWERFUL AGENCY OF "SUGGESTION."

I presume it would be proper for me to take up the history and development of "suggestion" as a distinct scientific entity, but time will not permit. The medical part of my audience can tell the laity of innumerable instances of so-called cure, due to the employment of this means—cures in all regards analogous to the best authenticated ones reported by the professional wonder workers. But, while the great medical profession recognizes suggestion as a therapeutic agency of utility in certain instances, it also recognizes the limits within which it should be employed. Powerful as is this agency, the educated physician inquires: "Has a broken bone been 'suggested' back to continuity?" "Has a tubercle bacillus been 'suggested' into innocuousness?" "Has diphtheria been 'suggested' into benignity?" "Has cancer been 'suggested' out of its malignancy?" "Has yellow fever been 'suggested' out of its virulency whether the suggestion has been imparted by fumbling the bones, by prayer, or by incantation?" Yet these are but a few of the many conditions for the cure of which these people, in whom "no intellectual proficiency is requisite," are prescribing, and in many instances are administering by force a recognized agency, the efficiency of which lies in absolutely other directions.

THE ATTITUDE OF THE LAW.

The law extends no recognition to the practitioners of these vagaries—the "Christian Scientists," the "Divine Healers," the "Mind Curists," the "osteopaths," and others of the same genus; it grants them no privileges and deprives them of no rights. It simply enjoins that those who assume responsibility for the care of the sick or injured shall, before doing so, present to the State presumptive evidence that they are possessed

of certain fundamental knowledge which the State assumes to be necessary for a proper exercise of judgment under such circumstances. The law does not prohibit the acquisition or the proper application of any additional "Christian Science," or "Divine Healing" or "osteopathy," or from any other source. If it did, I would be in a sorry plight in my own State, for I have shown you that I am an accomplished Christian Scientist. To make my proposition a little clearer, let me recall that I have demonstrated to you that the central truth in all this mysticism and supernaturalism is the potent agency of "suggestion"—therapeutic suggestion. The law simply enjoins that those who assume to prescribe this remedy, like those who prescribe opium, or chloral, or chloroform, or cocaine, or like those who assume the entirely equal responsibility of withholding all remedies shall know enough to know what they are doing and why they are doing it. This is the theory of the law broadly stated. In its enforcement the state declines to ignore the accumulated experience of ages, the gathered knowledge of centuries, and to accept in their stead the dicta of egoistic dreamers or the platitudes of the conscienceless adventurers, for the comprehension of whose strange philosophies "no intellectual proficiency is requisite."

IN CONCLUSION,

Permit me to say that the great profession of medicine, concerned as it is with truth and humanity, can well afford to watch with good-natured interest these evanescent phases of ever-recurring phenomena. They are beautiful object lessons in the psychic lives of peoples. They furnish splendid demonstrations of the persistence of primitive conceptions and their modifying influence upon human life. The great clinic is now in session.

—:o:—

TONIC MIXTURE.—

R Celerina, ℥ ij.

Tinct. gentianæ comp., ℥ j.

Elix. simp., q. s. ad ℥ iv.

M. Sig. Teaspoonful three times a day.—*Ex.*

OBEISITY.—The newest treatment now used for obesity is thyroid extract. Tablets can be found in many drug stores. The older remedies were fluid extract of *phytolacca* (poke-berry) root in doses of about five minims, and extract of *Fucus vesiculosus* (sea wrack) in doses of three or four grains three times a day. Those who have had experience in treating obesity generally agree in claiming that as a rule the best results can be secured from dieting the patient and keeping him well exercised in the open air. The supply of carbohydrates and fats should be limited, and except in gouty and diabetic cases liquids of all kinds should be limited to the smallest quantity possible. Beer, wine, and liquors of all kinds should be prohibited. The so-called banting system permits of the use of an abundance of water, and also allows the use of red wine, but it has not proved very satisfactory. Dr. Weir Mitchell recommends a diet of eggs and milk to the exclusion of everything else. He orders the patient to take an egg with half a pint of milk every three hours while awake. This he keeps up for three weeks.—*Am. Surg. Bull.*

ACUTE ATAXIA OF CHILDHOOD.—Filatoff (*Arch. für Kinderheilkunde*) says that acute ataxia in childhood is not a disease *per se*, but merely a symptom, and that, further, it is a very rare condition, and one not mentioned in text-books on pediatrics. Neurologists describe it under the designations of pseudotabes, nercotabes peripherica. The phenomena, as far as the cord is concerned, are wholly functional, and structural changes occur only in the peripheral nerves. Etiologically there are four forms: (1) Toxic, due to alcohol, arsenic, lead or mercury, parenchymatous neuritis being present. (2) Infectious, the most common form, diphtheria being by far the most frequent cause, while typhoid fever, variola and syphilis are occasionally responsible. (3) Neurotic, including the hysterical and reflex forms, and (4) Central, when the mischief may be seated in the cerebrum, cerebellum, or bulb.—*Medical Review of Reviews.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

"THE NEW YEAR."

SINCE we of the NEW ENGLAND MEDICAL MONTHLY sent greetings to our patrons a year ago much has happened in the way of history making, not alone for the country, increasing its fame and extending its domain, but history for the medical profession as well. We know something more to-day about gunshot wounds, the effect of the Masseur bullet, the necessity for careful preparation of troops before taking them to a different climate, and above all the necessity of a better knowledge of sanitary affairs, so that when great bodies of soldiers are brought together the officers, medical and line, will have been educated to the point where they will insist upon a clean tent and ground, well-cooked food and a pure water supply, with sinks properly made which have been properly disinfected, so that typhoid fever will not kill more than the guns of the enemy.

There has been a heap of fault-finding on the part of some, especially of the women, who seem to have wanted to run the war, a deep murmuring among the Red Cross, who seem to think it fell to their particular province to take care of the sick and wounded regardless of the Surgeon-General's office. (Incidentally it strikes that this organization has been spending a heap of money all this time without accounting to anybody. We have waited

with a good deal of patience to hear some sort of statement from the Red Cross as to the amount received, the amount paid out. It would also be very interesting to know what salaries were paid, how much they were, and many little details which would inform us as to the work of this organization.)

But this is wandering from the subject. The happy season is with us and we want to extend to all our friends the most joyous wishes for a merry Christmas and a happy New Year, indulging in the hope that during "99," the last year of the old century, we may make a new record for the NEW ENGLAND MEDICAL MONTHLY, by bringing it in closer touch with the medical profession of the country, for we have the highest aspirations to accomplish this.

CHRISTIANSCIENCE. A SOCIOLOGICAL STUDY.

AT A RECENT meeting of the Northwestern Ohio Medical Society, held on December the 8th, at Lima, Ohio, there was a public session held in the Opera House of that city. The address of the evening was upon the above subject and was delivered by Dr. Charles A. L. Reed, of Cincinnati. This address has attracted wide-spread attention and is bound to interest thousands of people throughout the country. This is an exposition of this great fad, we were almost going to say fraud; we think we had better. The Doctor is so well known as a vigorous writer and a good expresser of vigorous thoughts in vigorous language, that one may well appreciate the fact that this subject was handled without gloves. It is so interesting, so full of pertinent thought and wisdom that we have reproduced it in full, and call the special attention of our readers to it in another column of this issue.

MALARIA AS DEFINED BY PROF. KOCH.

HOWEVER much Prof. Koch may excel in other fields of work it is apparent that as a *bona fide* discoverer of disease germs and anti-toxins he is not a grand success. After the cholera and tuberculosis fiasco, the medical profession, at least, lost faith in the accuracy of his reports and even went so far as to question the honesty of his motives. In view of these facts it is not surprising that his recent paper on malaria, based upon certain researches in South Africa, should have received prompt and unusually fierce criticism at the hands of the medical press and particularly scientific observers resident in Africa, Italy and other malarious countries.

Koch's assertion that quinine in large doses is decidedly injurious and in fact often the cause of that malarial condition known as black-water fever, seems to have excited considerable ridicule, and his opponents take occasion to comment upon the promptness with which this observer gives birth to a theory after a brief examination of a few hospital cases.

Whether the deductions of Koch be entitled to credence or not, the publication of his paper and the resulting criticism will be productive of much good and will stimulate further investigation. Indeed we learn from the official report of Consul Mason, of Frankfort, that a proposition has already been made to the Prussian minister of medical affairs to fit out two expeditions for a careful scientific investigation of malarial diseases. One of these will pass three months in Greece and Italy while the other will proceed to New Guinea, East Africa and India, and spend two years there in collecting data bearing upon all these questions under consideration.

In the study of the etiology and treatment of malarial disease comparatively little progress has been

made of recent years and there remain many complex problems which demand solution. Not only from a sanitary, but from a political, point of view, is further knowledge of the highest importance to mankind. In certain portions of India, Guiana and Africa colonization is impossible by reason of the extent and virulency of these diseases, while the whole southeastern coast of Corsica and Sardinia and a portion of Italy nearly 1200 square miles in extent are practically uninhabitable from these same causes.

The profession will, therefore, await with some interest further developments in this line of investigation and will be thankful for even one additional fact on the etiology of the disease, provided it is well substantiated.

—:O:—

After Office Hours.

I.

MY COLLEAGUE, Dr. Budweiser, is not only a physician of Teutonic birth, but is at the same time a gentleman and a philosopher. The term philosopher implying, of course, that he is wholly unconventional—takes things as they come and disregards the creasing of his trousers. These qualities, as you know, form a by no means rare combination in the Vaterland, though a somewhat anomalous one in this land of the mighty dollar, where habits of meditation must be surrendered in order to pass judgment upon the many dry, material facts and problems which are daily passing in review before us in our struggle for existence. So I have often wondered how he could so successfully perform the many duties of his profession and yet have time to read the latest novel or scientific article and afterwards comment in such an interesting way upon the points which specially impressed him. He certainly could not have done it had he

not claimed a short period each evening after office hours in which to devote himself to what he considered a religious duty, for at this time the most persistent advocate usually fails to inveigle him into making a call and the many devices of his patients to secure attention are exceeded only by the ingenuity of the doctor in evading their demands.

I never fully understood the mental status of the man or the principle which dominated him until the other evening when we were talking about literary doctors and I ventured the remark that this class was, as a rule, somewhat lacking in a practical knowledge of their calling.

"The purely medical practitioner" said the doctor, crowding a service charge of tobacco into the deep porcelain bowl of his pipe and lighting it with a sliver of wood from the fireplace, "is a poor, miserable devil, though most likely he doesn't realize it. The man who makes a hobby of his profession is just as narrow and just as incomplete as the fellow who sacrifices himself on the altar of dark blue china, or goes poking around the country with knee pants and a bag of golf sticks. Being convinced that he has cornered the one great essential fact of the universe he invariably greets the many beautiful things around him with a vacant stare, simply because he doesn't know what they mean and finally after going through life in this style, he shows up some day at the gates of the Celestial City with one virtue but with a load of negative sins which Christian himself would have at once declared over-weight and excessive. Don't get wholly absorbed in any one thing—even medicine"—resumed the doctor, as he counted out thirteen sugar-of-milk tablets in answer to an urgent call from across the street, "or you will become in time a slave to it, and the moment it gets hold of you, you will commence to go around telling people all about it and making of yourself a public

nuisance which the present health laws of the land are powerless to suppress. Why, I know a young man in the next street who thinks that everybody either has, or is going to have, appendicitis. So one day, a patient of his, ———"

"But, doctor," I interrupted, "don't you think that the physician who is devoted to his profession is apt to make a success of it?"

"That depends upon your definition of the term success. As far as mere money-getting is concerned he may do well, but when it comes to getting the most and the best out of life he is a dismal and colossal mistake.

On the other hand, men who have made a success of their little, private relaxations are by no means failures in their profession. Did Holmes know any less of anatomy because he happened to write prose that became classic and verses that placed him in the first rank of American poets? Surely Weir Mitchell is no less a skilled specialist because he gave us 'Hugh Wynne' as well as many bright character sketches in addition to his medical contributions. Men like these have the advantage of many of their fellows in that they can lead, as it were, a double existence, one of which is a sphere of aches and pains and disappointments with the barrenness and monotony of every day existence, while the other is a region of calm where in the byways of culture and thought we lose our troubles and ourselves as well. With such resources, we take up a position on the heights where we plant the banner of conquest and whither the clamor of the importunate and the censure of the unappreciative can never ascend. What a relief it must have been for Mitchell to get away from the woes and vagaries of the neurasthenic and lose himself in the 'Adventures of François' and how fortunate that Lydston could fly once in a while to 'Over the Hookah,' where tertiary lesions were unheard of and

where the pioneer gonococcus had not yet planted a colony!"

A patient came in just here to inquire whether he should get the cod liver oil which the doctor had written for, or whether he had better take the druggist's own emulsion which the latter said was a very much better one. * * *

"You will excuse me for leaving you so unceremoniously!" said the doctor, as he re-entered the office a few minutes later and hung up his straw hat and overcoat behind the door. "But, as I was saying, the one idea man who fails to keep busy or suffers reverses or disappointments and has not a second idea to sustain him, gradually sinks lower and lower in the professional or social scale and may finally become a 'heeler' for a drug store—a specialist in menstrual irregularities, or even a politician."

"But don't you think on the whole, that the honor and dignity of our calling is being fairly well sustained?" I asked.

"I was just going to remark upon its present *personel*. Why, you know how this grand old profession of ours was once esteemed and venerated. How it came to us out of the mists of tradition laden with the poetry and romance of prehistoric days, and down through the long succession of magicians, priests and prophets we find a sort of adoration—a species of hero-worship of those who elected to become healers of men. By the way, do you remember how the son of Syrach spoke of us?" and the doctor, after a long search, produced a shabby looking volume which at the time was doing duty as a castor for one of the hind legs of the sofa, and opening it somewhere in Ecclesiastes, read: "Honor the physician with the honor due unto him for the uses you may have of him; for the Lord hath created him. For of the Most High cometh healing and he shall receive honor of the king. The skill of the physician shall

lift up his head and in the sight of the great man shall he be in admiration."

"Now cast your eye over the members of the Brotherhood," said the reader, closing his book, "and tell me if times have changed and whether you see anyone whom you suspect the Lord created for the special purpose of doctoring people—I mean any besides ourselves!

"No!" he continued, after waiting in vain for a reply. "The wig and gold-headed cane have given place to the high collar and yellow shoes and the close unbroken intimacy and confidence existing between physician and patient is now but a memory of the past.

Why this should be the case is not difficult to say. Types change under the influences of environment. The fierce struggle for survival develops some qualities at the expense of others and it naturally follows that the higher ones, strictly speaking, must go to the wall. Commercial standards prevail. Competition is brisk and the goods must be sold in a legitimate way, if possible, but they *must* be disposed of. Hence we come by a perfectly natural process of evolution to the up-to-date drum—I mean, doctor, whose methods for *circumventing* people, as Pickwick had it, are many and peculiar. I have often wondered whether our conservative English brethren have been similarly affected by the spirit of the times. I fancy some of the old time conditions still prevail, or Robert Stevenson would not have paid them the tribute he did in his dedication of a volume of poems a few years ago, for he says:

"The physician is the flower (such as it is) of our civilization and when that stage of man is done with and only remembered to be wondered at in history, he will be thought to have shared as little as any in the defects of the period and most notably escaped the defects of the race. Generosity he has, such as is possible to

those who practice an art, never to those who practice a trade; discretion, tested by a hundred secrets; tact, tried by a thousand embarrassments and what are more important, Herculean cheerfulness and courage. So it is that he brings air and cheer into the sick room and often enough, tho' not as often as he wishes, brings healing.' "

—:O:—

Book Notices.

THE SEXUAL INSTINCT, ITS USE AND Dangers as Affecting Heredity and Morals. Essentials to the Welfare of the Individual and the Future of the Race. By James Foster Scott, B. A., Yale University, M. D., C. M. (Edinburgh University). Late Obstetrician to Columbia Hospital for Women, and Lying-in Asylum, Washington, D. C.; Late Vice-President of the Medical Association of the District of Columbia, etc., etc. Published by E. B. Treat & Co., 241-243 W. 23d St., New York.

The author offers no defence for the plain talk in which he indulges in this volume before us; he claims that the justification will be found in the body of the work itself. Its design is to furnish the non-professional man with a sufficiently thorough knowledge of matters pertaining to the sexual sphere—knowledge which he cannot afford to be without. He has endeavored to avoid vagueness and indefiniteness, and he truthfully presents physical and ethical facts without avoiding unpleasant topics or transgressing the limits of propriety. In his preface he says that "science strips all draperies from the object it examines, and, in the search after truth, sees no indecorum in any earnest line of study, and recognizes no impropriety in looking at objects under an intense light and in good focus." The future prospects of humanity, of course, rest in the sexual domain of those who are now living, and none will dispute that the degradation of mankind is due more to sexual irregularity than to any other cause. In this vein he discusses the subject matter with several widely different kinds of advisers, men of science,

doctors, ministers, lawyers, and with quite a large number of men about town, while some of it has been prudently discussed with women. As he tritely says, "Painful as it is to treat a subject so repulsive, a man cannot choose his duty, nor can he honestly evade it." Without question the book is one of intense interest and is bound to have a wide circle of readers.

TRANSLATION OF LECTURES DELIVERED by Aurelio Bianchi, M. D., Parma, Professor of Preparatory Clinical Medicine and of Pathology on the Phonendoscope and Its Practical Application. Chapters 1, 2 and 3 of this Book are the English Translation of Lectures Delivered by Professor Aurelio Bianchi, and it is the Direct Intention of the Publishers that this Book shall not be Mistaken for the Complete Book on Phonendoscopy in Course of Preparation: Geo. P. Pilling & Son, Philadelphia, Pa.

The instrument which this book describes was introduced by Professors Bazzi and Bianchi at the International Medical Congress in Rome, in April, 1894. It has quickly and prominently proven to be a substitute for the old stethoscope, because it served the purposes of the semiological examinations of to-day much better than it does. The book will be found an interesting one from many standpoints. We commend it to the careful consideration of our readers.

INTERNATIONAL CLINICS, A QUARTERLY of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs by Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (University of Penn.), Philadelphia; J. Mitchell Bruce, M. D., F. R. C. P., London, Eng.; David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland. Published by J. B. Lippincott Co., Philadelphia, Pa.

The International Clinics has now reached the end of the 8th series and the volume before us is of the same high plane of excellence which has made its predecessors popular and

famous. We find thirty-three contributors, among them the names of the most prominent teachers in the country. The subjects cover the entire range of therapeutics, materia medica, surgery, practice of medicine and gynecology.

TRANSACTIONS OF THE IOWA STATE Medical Society, Volume xvi, Forty-Seventh Annual Session, 1898. Published by The Keehn-Hafner Mfg. Co., Burlington, Iowa.

This volume of transactions, we are glad to note, shows a vigorous and healthy condition of the Iowa State Medical Society. There are many interesting papers, together with much interesting discussion of the same, all of which goes to make it a valuable addition to the current medical literature of the day.

—:o:—

Correspondence.

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Editor New England Medical Monthly:

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about \$180, will be made on July 14, 1899, provided that an essay deemed by the Committee of Award to be worthy of the Prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published, and must be received by the Secretary of the College on or before May 1, 1899.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College; other essays will be returned upon application within three months after the award.

The Alvarenga Prize for 1898 has been awarded to Dr. S. A. Knopf, of New York City, for his essay entitled: "Modern Prophylaxis of Pulmonary Tuberculosis and its Treatment in Special Institutions and at Home."

Thomas R. Neilson, Secretary.

Washington, D. C., Nov. 29, 1898.

Editor New England Medical Monthly:

At a recent meeting of the Joint Committee of Scientific Societies of this city, on Vivisection, the following resolution was adopted: "Resolved that the Secretary be authorized to call the attention of the prominent medical and scientific journals of the country to the importance of the meeting of the American Humane Society, to be held in this city in December proximo, and to request that editorial notice be taken of the danger that the influence likely to be exerted at that meeting may cause the vivisection bill now pending in the Senate to be called up and passed." I was also directed to request that you will advise your readers to write to their respective Senators and Representatives in regard to the matter.

D. S. Lamb, Secretary.

—:o:—

HOT-WEATHER LITERATURE.—Those physicians who are away on a well-earned vacation probably want to forget all about medicine and are glad of the opportunity of escaping the weekly journal and the monthly heavy periodical. The stay-at-home also may prefer the cool spot, if he can find it, in his house and a light novel or the latest light magazine and is perfectly willing to let medical reading pass unnoticed after hard work in a warm city. In warm weather the energy is lacking to do any more than is positively necessary, and the writer and reader is excused from taking that interest in deep matters during this period of supposed rest. When the warm weather is over and the physician comes back to hard work, he can then take up his practice and heavy reading with renewed interest.—*Maryland Medical Journal.*

Society Reports.

NEW YORK ACADEMY OF MEDICINE. SECTION IN ORTHOPEDIC SURGERY.

Meeting of November 18, 1898.

DR. W. R. TOWNSEND read a paper entitled "The Prevention of Deformity after Excision of the Knee in Children."

He reported the histories of eight cases seen within the past two years at the Hospital for the Relief of the Ruptured and Crippled in which excision had been performed in early life in other hospitals. All of these cases presented some shortening, the greatest amount being $9\frac{1}{2}$ inches, the least $\frac{1}{2}$ inch. They all presented flexion deformity, the greatest was held at right angle, the least deformity was 25 degrees, the average being nearly 50 degrees. Two showed bow-leg deformity and one knock-knee. Two had motion and six were firm. He quoted the views of several orthopedic text-books and the Treatise of Surgery by American Authors to show that the operation was indicated only in exceptional cases. The shortening was greatest when both epiphyses of femur and tibia were removed and in early childhood with extensive disease present it was difficult to remove all diseased tissue without invading the cartilage between the epiphysis and the shaft of the bone. He showed the necessity of long continued after treatment, either by plaster-of-Paris or some form of brace if deformity was to be prevented, for many cases of apparent bony union began to present deformity months after the operation and in some it rapidly increased. The different methods of correcting the deformities were referred to and forcible correction under an anesthetic was advised only in those cases where by very slight pressure the flexion deformity could be overcome. In several cases osteotomy or another excision was advised. Braces and operative procedures were advocated for the bow-leg and knock-knee deformities.

He presented two patients who had had excision of the knee in early life, to illustrate some points made

in the paper. The first patient was a boy $15\frac{1}{2}$ years of age who had an excision performed when he was 3 years old, for a tubercular osteitis of the right knee. He was admitted to the Hospital for the Relief of the Ruptured and Crippled at the age of 6, with slight flexion deformity and two discharging sinuses. The treatment was local and constitutional. The flexion deformity was corrected by manual force under an anesthetic. At the age of 10 there were 6 inches of shortening. At present there were $9\frac{1}{2}$ inches, 6 inches in the femur and $3\frac{1}{2}$ in the lower leg. By tilting his pelvis he walks quite well with a $7\frac{1}{2}$ inch patten, despite the bow-leg on the right side and the absence of motion at the knee. The bow-leg deformity has increased of late years and is now well marked. This and knock-knee deformity were both liable to occur unless protection was given to the knee for a considerable time after the operation of excision.

The second patient was a boy of 9 whose left knee was excised in Germany. On admission to the Hospital for the Relief of the Ruptured and Crippled, when he was 8 years of age, there were 65 degrees of flexion deformity and slight motion. The flexion was easily reduced by manual force to 20 degrees with less than 10 degrees of motion. His right femur was $11\frac{1}{4}$ inches long, his left 10, his right leg 13 inches, his left 12. The shortening was a trifle over 2 inches. He illustrated the ordinary form of flexion deformity and also the fact that bony union did not always occur. He was wearing a Thomas knee brace with straps attached to the foot-plate and these fastened to buckles and adhesive plasters applied to the leg below the knee. Continual traction was thus made and the knee was slowly but surely being straightened. It was needless to add that for this traction to be efficacious in reducing the deformity it should be continuous and carried to the full limit.

DR. R. WHITMAN added foot-drop, from division of the external popliteal nerve, as a possible disability following excision of the knee. He had seen two cases in which the nerve had been divided, either during excision or else during previous

treatment of an abscess. One of these patients had 4 inches of shortening and knock-knee, but his most serious disability was caused by the foot-drop which necessitated a special apparatus. The course of this nerve should be borne in mind in all operations about the knee.

DR. R. H. SAYRE said that operative surgeons were too prone to think that supervision of a case might cease with healing of the wound, whereas they would learn, if they followed their results for several years, that relapses were very frequent in cases that were not protected for long periods of time after operation. This was especially true, not only in excision, but also in club-foot and various rachitic deformities. In using the Thomas splint with a foot-plate to prevent dropping of the anterior part of the foot he thought that friction and the pressure of the foot would prevent the foot-plate from sliding on the rods and would thus interfere with the straightening of a bent knee or the relieving of an inflamed knee from pressure. He preferred to keep the toe up by pulling down the heel by a strap fastened to the bottom of the splint and buckled to the back of the heel of the shoe.

DR. TOWNSEND said that the foot-plate on the Thomas knee brace was intended only for patients who were not walking and when there is no danger of injury being done by jarring. The leather traction strap was used for walking patients.

DR. A. B. JUDSON said that these deformities were simple in kind: lateral bending which caused knock-knee or bow-leg and antero-posterior bending, producing flexion or hyperextension. The mechanical treatment was also simple, consisting of the application of pressure and counter-pressure in such directions as to oppose the deformity. If the patient was walking much of the force thus applied laterally would be absorbed in helping to sustain weight instead of being used against the deformity and the recumbent position or an ischiatic crutch would have to be considered. Patients deformed after excitation did not readily submit to tedious mechanical treatment which, if it had been prescribed at first,

might have led, in due time, to recovery without deformity. Formerly the established treatment for white swelling of the knee was amputation. Then the high water mark was found in the conservative operation of excision. We now, however, had a more perfect conservatism in mechanical treatment, which avoided the reproach of being mere expectation because it gave to the affected part a new and radically different environment, taking the limb from its laborious position under the weight of the body and giving it pendency and rest.

DR. V. P. GIBNEY said that if the case was desperate enough to demand excision then amputation was the preferable operation. He had been forced to this conclusion by many years of hospital out-patient observation. The high, ungainly pattens supplemented by springs for the legs to protect the ankles did not compare with an artificial limb either practically or cosmetically. He would ask the author of the paper whether a patient with extremeshortening following excision would not be better off in after life if an amputation were done? After the leg was straightened in these cases the patients were sure to return later for treatment. He would amputate and apply an artificial limb, especially when the patient was as old as the 15 year old boy who had been exhibited.

DR. TOWNSEND said that if the patient referred to were a man instead of a boy he would advocate amputation. For himself, if he had such a leg and were rich enough to have a new artificial leg every three or four years, he would much prefer to have the leg amputated than to wear such a heavy apparatus.

DR. SAYRE said that if the amputation should be thought best on account of the great shortening of the leg after excision, it would be best to amputate above the knee and so gain the advantage of a movable knee-joint. But it would often be wiser to fasten an artificial limb to the patient's foot when in a position of marked equinus than to do a Syme's or Pirogoff's amputation. He recalled a case in which there had been a failure of growth in one femur with shortening of 9 or 10



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A Winter Remedy

That Codeine had an especial effect in cases of nervous coughs, and that it was capable of controlling excessive coughing in various lung affections, was noted before its true physiological action was understood. Later it was clear that its power as a nervous calmative was due, as Bartholow says, to its special action on the pneumogastric nerve.

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Acute Inflammation of the Prostate Gland

The *Journal of the American Medical Association* contains a report on inflammation of the prostate gland, which was presented to The Section on Surgery and Anatomy at the Forty-ninth annual meeting of the American Medical Association, held at Denver, Colo., June, 1898, by Listen Homer

Montgomery, M. D., of Chicago, Ill. His plan of treatment in acute inflammation of the prostate gland is to wash out the abscess cavity with hydrogen peroxid, give copious hot water enema and hot hip baths frequently, avoid morphine internally and advise care lest the patient strain at stool or during micturition. On the theory that toxins are retained in the circulation and within the gland and to prevent degeneration in the gland substance, he administers triticum repens or fluid extract tritipalm freely, combined with gum arabic or flaxseed infusion. Along with these remedies the mineral waters, particularly vichy with citrate of potash, go well together. Hydrate of chloral or this salt combined with antikamnia are the very best anodyne remedies to control pain and spasms of the neck of the bladder. These pharmacologic or medicinal remedies are the most logical to use in his judgment, while externally, applications of an inunction of 10 or 20 per cent iodoforn, lanoline, as well as of mercury, are also of value.

Migraine—(Catarrhal.)

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Sig.—Crush and take one every three hours.

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—*American Journal Surgery and Gynecol.*

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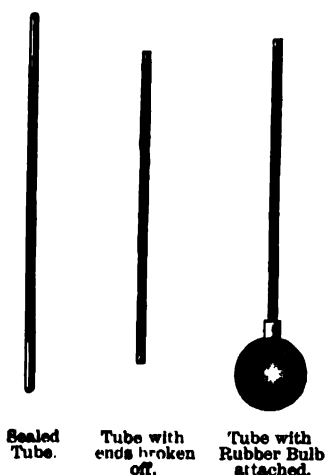
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To those who are in the least acquainted with our methods of serum-production it will be unnecessary for us to state that in the elaboration of vaccine we guard every step with the most uncompromising scrutiny and assure the purity of the product by the most rigid antiseptic and aseptic measures. The heifers before being vaccinated are tested with tuberculin. As an additional safeguard the animals are slaughtered as soon as the vaccine is collected, and a careful inspection of the carcass is made by an experienced meat-inspector; if any evidences of disease are found the vaccine is destroyed.

“Points” are Unreliable and Unsafe.

It is a noteworthy fact that manufacturers of vaccine have generally ignored those rules of rigid surgical asepsis which have been recognized for years as absolutely necessary when the physician desires to make a break in the healthy skin of his patient. As a result, septic infection after vaccination has been commonly met with in general practice. The object of the product now offered by us is to produce infection with pure cowpox and to avoid the sores and sloughs which naturally follow the use of vaccine material carelessly prepared and often loaded with the organisms of ordinary pus.

In 1894 the Columbus Medical Laboratory of Chicago made a careful examination of eleven different varieties of vaccine “points,” made by as many manufacturers, and only one was found to be free from bacteria and blood-cells. Of the rest, several were decidedly unfit for use.

But, notwithstanding all our aseptic methods, vaccine, like other moist physiological products no matter how carefully prepared and protected, is liable to deteriorate after a certain period of time. For this reason we affix the date of shipment to each package, and authorize the drug trade to give fresh VACCINE in exchange for any quantity of unused and deteriorated virus purchased from us in good faith.

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inches, all the joint motions being perfect. The patient wore an artificial leg attached to his foot and walked with hardly any limp, the difference being noticed only when he was seated, the knees then being at different heights above the floor.

DR. JUDSON said that the apparatus referred to was very useful, but that generally it could be improved by making a firmer pocket for the reception of the foot as it inclined downwards in extreme extension. This part could be made not only extremely firm but also adjustable at will by the use of webbing and buckles. The apparatus could also be improved by making it strong enough to transfer a part of the weight of the body from the anterior part of the foot to the tibia near its tubercle, as was done in the ordinary brace for talipes calcaneus.

DR. TOWNSEND said that people walked better when the limb was amputated below the knee, but of course this applied to persons with a movable knee. When the femur was shortened several inches and the knee ankylosed an amputation of the thigh would have to be done in the lower $\frac{1}{3}$ of the femur and by so doing a movable knee could be obtained.

ELONGATION OF THE FEMUR FOLLOWING NECROSIS.

DR. TOWNSEND also presented a man 55 years of age, a laborer by occupation, whose right femur was $2\frac{1}{2}$ inches longer than his left. He walked with scarcely any limp and wore a shoe raised $1\frac{1}{2}$ inches. The history he gave was that he was perfectly well until the age of 12 when from some unknown cause a swelling occurred on the lower and inner side of the thigh and when it broke some pieces of dead bone came away and pieces continued to come away for nearly a year. Up to the time of this swelling, his two limbs had been of equal length. The lengthening began to be noticed about the age of 13 and had reached its maximum when he became of age. The knee-joint had always been freely movable and was perfectly so to-day. The necrosis affecting the lower end of the femur evidently in this case had produced an irritation and increased

growth of the cartilage and bone at the junction of the lower epiphysis to the shaft. Lengthening from this cause had been noted in osteitis, but this was the greatest amount Dr. Townsend had ever seen. The circumference of the thighs and legs was the same and there was a small depressed white cicatrix above the inner condyle.

DR. SAYRE said that the suggestion had been made that after excision of the knee the epiphysis of the opposite leg be scratched in order to prevent it from outstripping the affected limb in growth. But the effect of irritation of the epiphysis in the patient exhibited would indicate that artificial irritation might cause increased instead of diminished growth. He recalled a case in which osteitis affecting the hip had caused increase in the length of the limb, but not so much as in Dr. Townsend's patient.

DR. GIBNEY said that Dr. James Berry, of Portsmouth, N. H., had analyzed a large number of cases of osteitis of the knee-joint and in all of them there had been elongation. He wrote a paper upon the subject some ten or twelve years ago, based upon his observations at the Hospital for the Ruptured and Crippled, at which time he was house officer. None of the cases analyzed were treated by the protection apparatus and a perineal crutch was not used. So we need not lay this elongation to the apparatus now employed.

DR. WHITMAN recalled a case similar to that of Dr. Townsend. A man was admitted to hospital for fracture of the femur which was found to be $1\frac{1}{2}$ inches longer than its fellow. There were several sinuses of indefinite duration. The thigh was amputated because of failure in repair. At the point of fracture the bone was hypertrophied and eburnated which accounted for the non-union. The lengthening had been due to constant irritation of a fragment of necrosed bone. The most common cause of elongation of bone was specific disease.

COXA VARA.

DR. WHITMAN exhibited a boy 17 years old, affected with typical left coxa vara of two and one-half years duration. The patient had been un-

der observation for two years. A perineal crutch, after being in use for about eight months, was discarded nine months ago. He had had no other treatment. The trochanter was above Nélaton's line and displaced forward causing a very noticeable change in its contour. The leg was adducted and rotated outward and a moderate degree of compensatory knock-knee was present. Flexion of the thigh was checked at 120 degrees but extension was more than normal. These appearances and changes indicated that the neck of the femur was depressed beyond a right angle with the shaft and twisted backward. The patient had been before the Section on May 21, 1897. At that time the actual shortening had been $\frac{1}{2}$ inch (see the NEW ENGLAND MEDICAL MONTHLY, August, 1897, p. 359), which had increased to $1\frac{1}{2}$ inches. Apparent shortening, due to adduction, had increased from $1\frac{1}{2}$ inches to 3 inches and motion had become more limited. An operation was advised in order to secure relief from the discomfort caused by lameness and restricted motion. Osteotomy would be done below the trochanter to correct the adduction and outward rotation. In younger subjects with less advanced deformity a cuneiform section should be made from the base of the trochanter to actually restore the proper angle of the neck.

ERYTHEMA NODOSUM OR NEUROMATA.

DR. S. KETCH presented a man who had applied to the Orthopedic Dispensary for relief from a condition which could not be classified among the affections known as orthopedic, the diagnosis lying between erythema nodosum and neuromata. The patient was a Russian, 35 years of age and a pedler. He complained of intense pain in the lower extremities, coming on eighteen months ago in the right leg and a few weeks ago in the left. The pain was more severe when he was resting and was limited to an increasing number of points below the knee, one being at the lower part of the posterior surface of the right thigh. At these places there were slight reddened swellings, pressure on which caused pain altogether out of proportion with the appearances. There was a

moderate degree of double flat-foot of which he did not complain and a slightly varicose condition of the veins. Otherwise he appeared perfectly well and denied rheumatism and venereal disease.

DR. WHITMAN did not think that the pain was due to neuromata because the swellings did not correspond to the course of any nerve and the appearances were not those of neuromata.

DR. SAYRE said that as there was some evidence of acute inflammation of the veins the trouble might have had its origin there.

DR. KETCH said that acute erythema nodosum might well cause an inflammatory condition of the veins.

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Abstracts.

HOT AIR FOR CHRONIC RHEUMATIC ARTHRITIS.—I desire to report the success of the Betz hot-air bath. For reference to this case see page 116, February *Clinic*.

Six years ago she had her first attack of rheumatism, lasting one year, and, although sixteen, had to learn to walk again.

This attack commenced five years ago in the left hip, then the left knee and ankles. She was very thin, excepting the swollen joints and feet, for about a year vomiting food. Nothing would remain in her stomach long enough to be digested. Her suffering was intense; her toes, ankles, knees, hips, vertebræ and all joints of the upper extremities became fixed, so that she could not feed herself or move in bed one inch to change position.

Her progress has been steady from the day I commenced, brought about by a wonderful amount of patience on her part, and plenty of hard work and "keeping everlastingly at it" on my part.

The first hot-air bath was given November 6, 1897, when 225° caused much uneasiness. I would work all her joints passively, and we soon had her right knee in fine shape. November 19 the left knee cracked when forced extension was used, causing awful pain; but five to ten minutes in the heater removed all

pain. The baths were given every one, two or three days, as the knee would permit, and used on the back on alternate days. By using two heavy bath towels much higher heat was used. On November 22 it reached 260°; December 26, 270°; January 18, 322.5°. These baths caused excessive perspiration over the whole body.

The sweating is less now, but makes her awfully warm. From 230° to 260° will accomplish all the good higher heat will do. I continue from thirty to forty-five minutes, rub the leg thoroughly dry, apply a stimulating liniment, wrap a warm flannel about the limb and place her on a lounge, well covered up, for a good rest of two hours. Sometimes she sleeps at this time. Her appetite is very good, digestion perfect and bowels regular.

The heat to the back has entirely relieved her of all the pain that has been there these years, especially severe at menstrual periods. Now there is none of this, and although she can turn over in bed at will, she sometimes sleeps so well that when morning comes she finds her position the same as when she went to sleep, something utterly impossible before using the Betz heater.

The left arm at shoulder and elbow is very nearly normal in all its motions; the wrist and fingers are somewhat fixed yet. The right arm, always very bad, permits about sixty per cent. as much motion, but the wrist and fingers are quite rigid yet. She can stand almost erect now, and by placing her back against the wall can straighten up, with her heels nearly touching the mop-board; and a very little pressure places her in a perfectly upright position, while a few weeks ago it was all I could do with both hands pushing against her shoulders to straighten her, and then only for a moment, as the tension of the muscles of abdomen and thighs brought on unbearable pain, cramping her severely. This has almost entirely disappeared. She can dress, undress, get into bed and out of it unassisted, sweep the floor, wash the dishes or dry them without sitting down to rest. At first she had to have an elevated seat, then use two chairs to rise to her feet. Now she

can, by placing her left hand on a chair, get up without any trouble.

I am giving most of my attention to her left knee, believing that if she can walk fairly well improvement of all the other joints will naturally follow from the increased use and muscular development. She says that sometimes when she gets to thinking how utterly helpless she used to be and the severe pain she had to endure compared with the present improved condition, it makes her so happy she has a good cry over it. She is a very bright and intelligent young woman, of fine family, and fully appreciates any benefit done her.

I trust that the history of the above case may be beneficial to others.

C. Allen Snyder, M. D.

Farley, Iowa.

Alkaloidal Clinic.

DRY TREATMENT OF PUS POCKETS. Del Vecchio (*Gasetta degli Osp.*) urges the abolition of the practice of washing out cavities with antiseptic or sterile fluids after evacuating pus. He claims it is directly injurious, and cites a large number of cases he has treated "dry," in which the cure was much more prompt than usual. Even in case of a fistula he merely wipes it dry with gauze and applies a compressing bandage, without drainage or irrigation, occasionally instilling a few drops of some modifying liquid through the mouth of the fistula, left open.—*Jour. Am. Med. Ass'n.*

CARDIAC PALPITATION DURING CHILDHOOD.—In contradistinction to adults, in whom extracardiac causes frequently give rise to palpitation of the heart, in children it is often latent or semi-latent affections of the heart itself, which for years indicate their presence by cardiac palpitation alone. Of these are to be mentioned chronic endocarditis, mitral stenosis, etc. In addition to real disorders of the heart, cardiac palpitation in children may be due to gastro-intestinal disturbances (intestinal worms) incipient pulmonary tuberculosis, the commencement of menstruation in young girls twelve to fifteen years

of age, chlorosis, at times hysteria, excessive exertion and masturbation. Only after careful exclusion of all of these causes can the diagnosis be made of nervous palpitation. Therapy is naturally to be directed towards the removal of the cause. Mental and bodily overwork are to be interdicted, and a moderate amount of hydrotherapy employed (not too cold water, nor too long application). In addition to the strict observance of most important hygienic rules, the most efficacious medicaments will be found the bromides—particularly sodium bromide, seven to fifteen grains, twice daily.—*University Med. Magazine.*

NERVOUS HEADACHE.—In many cases of nervous headache a remedy is required which will not only relieve pain, but will tend to regulate the circulation of the blood in the vessels of the brain. As is well known, caffeine is one of the best remedies for this purpose owing to its effect in strengthening the heart action, increasing the vascular tone and promoting the elimination of excrementitious products from the system by stimulating diuresis. The association of phenacetin with caffeine in the form of the preparation known as hemicranin, furnishes an ideal remedy for the treatment of nervous forms of headache, as it not only promptly relieves the distressing pains, but at the same time radically removes their cause by promoting the excretion of waste products from the system and correcting circulatory disturbances.

MICRO-ORGANISMS RESEMBLING TUBERCLE BACILLI.—A. Möller, in a communication to the *Deutsche Med. Woch.* describes a bacillus [which he has obtained from timothy and other grass and the fresh droppings from domestic animals. This bacillus has a rapid dry growth with a yellow sediment, and is resistant to the action of alcohol. Inoculated into rabbits it produces miliary tuberculous nodules in the omentum, giant cells and cheesy patches in the lungs, which are very similar to those found in lesions of genuine tuberculosis.

They stain like tubercle bacilli, which they closely resemble, both morphologically and in their growth on glycerin agar. On bouillon this micro-organism forms a delicate, transparent, dry, pale yellow skin on the fluid, extending two to three centimeters up the glass. On shaking the tube fragments break off, which sink to the bottom. The author concludes his communication by referring to the points in which the "timothy bacillus" differs from others in its manner of growth.—*Journal of Am. Med. Assoc.*, July 23, 1898.

"ELECTRIC SUNSTROKE."—Lavrand (*Journal des Sciences médicales de Lille*, May 21st; *Presse Médicale*, June 29th) relates the case of an engineer who remained exposed for an hour, at a distance of about three feet, to the rays given out by two connected arcs under a current of fifteen amperes. His situation is described as being in that part of the cone of rays where the light was least, but the chemical activity the greatest. Three hours afterward he felt a tingling in his eyes and soon presented all the symptoms of sunstroke, lachrymation, redness of the skin of the face and of the conjunctivæ, and then very severe supraorbital neuralgia. These symptoms disappeared after the application of compresses wet with a boric acid solution, leaving only a little roughness of the skin. They are attributed to the chemical rays, and not to the intensity of the heat.—*New York Medical Journal.*

THE PALMO-PLANTAR SIGN IN TYPHOID FEVER.—Quentin draws attention (*Arch. Gen. de Med.*, May, 1898) to a sign which he considers to be of considerable use in the diagnosis of typhoid fever, and one which has hitherto not received much notice. It consists in a peculiar yellow coloration of the palms of the hands and the soles of the feet. During convalescence these same regions show marked desquamation. The writer points out that in a large series of cases of febrile affections collected by him, he has remarked the presence of a slight yellow tinge in some cases of acute articular rheumatism

and tuberculosis, but that in typhoid this coloration is much more intense. The explanation is obscure, but that offered is that the epidermic tissues undergo a special nutritive change in the presence of typhoid fever, probably due to elimination of toxic products through the skin.—*Ex.*

We particularly invite you to turn to page xx and read the announcement of the Dow Portable Electric Assistant Co. It is claimed for the Dow Portable Electric Assistant that it illuminates, as can no other device, all cavities, will extract any metals, performs light cautery work, and gives both galvanic and faradic

Reflector, the Cautery, the Electric Needle, the Otoscope, the Electric Probe, the Electro Magnet, the Electric Head Light, etc., etc. If you will write to the Company (kindly mention the MONTHLY), they will take pleasure in fully explaining the Case to you, and sending you a catalogue, which is descriptive of the Case complete, and of the attachments individually.

We particularly, however, call attention to two of the attachments, namely, the Otoscope, for examination of the ear and nasal passages, and the Electric Head Light. The Otoscope illuminates to a remarkable degree the ear and nasal passages, thereby enabling the physi-



currents. Furthermore, that it is unequalled for delicate operations in surgery, the adjustment of minor arteries; for oculists and for gynecological observations it is said to be unrivalled.

The illustration on this page shows the Special Assistant, which is fitted with a battery of six cells, thereby making it possible to use a heavy cautery. This Special Assistant is very complete, having all the attachments. To describe this Case, however, in detail is impossible without the use of cuts of all the attachments—the Direct Reflector, the Side

cian to locate the trouble and treat same accordingly. The Electric Head Light attaches to the Assistant, and can be focused so as to concentrate or diffuse the rays of light. It has been pronounced by eminent specialists as greatly in advance of the present head mirror. It has been pronounced by operators in rectal surgery all that can be wished for in the way of light; and aurists say that the concentrated rays enable them to successfully treat the most difficult cases.

Dr. Hugh Blake Williams, of Chicago, said of the Assistant: "It has

been in constant use for over three months. I have found it fully up to your representations and perfectly satisfactory. The Otoscope, Magnet and Antrime Lamp have proved particularly valuable. I have recommended it to several professional friends, and will take pleasure in continuing to do so." And this is only one of the many endorsements published in their catalogue.

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NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.—Dr. James B. Bullitt (*North Carolina Medical Journal*, September 20th) exhibited to the Louisville Surgical Society a contrivance for producing local anæsthesia by the use of carbonic-acid gas. He had been familiar for some time with the use of this gas in the manufacture of ice by the carbon anhydride system, and it occurred to him that the gas could be used very well for local anæsthesia. The apparatus decided upon for experimental purposes, which worked very well, consisted of a storage drum containing twenty pounds of the gas, which had been liquefied by very high pressure; probably twelve hundred pounds pressure at room temperature would be necessary to convert this gaseous matter into liquid form; and when pressure is released expansion of the liquid caused it to return to the gaseous state.

Local anæsthetics were becoming more and more used, and this would be a very cheap method of producing local anæsthesia. The drum which he exhibited cost three dollars and a half, but could be bought for three dollars with proper arrangements. When exhausted the drum could be

recharged. Attached to the outlet of the drum was a small brass pipe at the end of which was arranged a hypodermic needle, and by turning the small top valve the gas was liberated, and, passing out through the small pipe and the hypodermic needle, it produced in a very few seconds a small cake of ice in the piece of cloth held in his hand. When turned on the hand it immediately produced a white spot like ethyl chloride. It was apparently a very harmless procedure. A smaller drum containing, say, two or three pounds of gas could be made for surgical use. One thing in favor of the carbonic-acid gas for local anæsthesia was its comparative cheapness as compared with ethyl chloride.—*N.Y. Med. Jour.*

CARBOLIC GANGRENE.—Ponzio (*Gazetta degli Osp.*) claims that gangrene following the use of a phenicated solution is due to the compression of the bandage arresting the circulation. If a standard solution is used and non-compressing bandages ordered, neither the druggist nor the surgeon are responsible for the gangrene, which, if it occurs under these conditions, must be caused by some idiosyncrasy.—*Jour. Am. Med. Ass'n.*

TREATMENT OF ALCOHOLISM.—Dr. N. S. Davis recommends that the patient be placed under good physical and social surroundings. For impaired digestion, irritable nervous system, and disturbed sleep, a sixtieth of a grain of digitalin and a thirtieth of a grain of strychnine at each meal, with from twenty to thirty minims of diluted hydrobromic acid at bedtime, will, he says, give excellent results. For constipation, thirty minims of fluid extract of rhamnus purshiana may be added to the acid. Instead of the digitalis and strychnine, a pill or capsule of a grain of extract of hyoscyamus, with three grains of cerium oxalate, may be given. Before an anticipated period of dissipation, a pill of two grains of quinine sulphate, the same amount of extract of eucalyptus globulus, and a third of a grain of extract of

cannabis indica should be given with each meal for two weeks. The patient should be separated from his associates, and if this can not be done in any other way, he should reside in a well-regulated asylum for from six to twelve months.—*N. Y. Medical Journal*.

THE INCREASE OF SPECIALISM.—The *Druggist's Circular* for October quotes the following from the *Chicago News*:

Old M. D.: "Are you having much practice?" Young M. D.: "Yes, quite a good deal, thank you." Old M. D.: "Ah! I'm glad to hear it. Are you making a specialty of any particular thing?" Young M. D.: "Yes, indeed. About nine-tenths of my time is devoted to the practice of economy."

A PECULIAR CASE OF ACUTE HEPATITIS.—Dr. Jacob Fuhs (*Brooklyn Medical Journal*) records a case of acute hepatitis signalized by the following peculiarities:

1. "A continued fever; not the intermittent, hepatic fever of Charcot.
2. Only very slight jaundice.
3. The gall bladder was only very slightly enlarged.
4. Very marked enlargement of the liver.
5. No marked tenderness over the gall bladder.
6. A circumscribed swelling at the anterior surface of the liver, very tender and painful, and about three fingers' width above the lower border.
7. There was no pus found in the gall bladder, nor in the discharges from the womb, nor about the gall-stones.
8. The fever did not abate until the gallstones that apparently came from the ducts had passed."—*Ex*.

SOME CLINICAL AND PATHOLOGICAL PHASES OF GALL-STONES.—Cordier, in a paper published in the *Journal of the American Medical Association*, gives the following summary relating to gall-stones:

1. Cholelithiasis is of frequent occurrence and usually gives rise to symptoms either severe or obscure.

2. Cholesterin, as a gall-stone-producing agent, must be present in an abnormal quantity.

3. Cholesterin is, in a great measure, a product resulting from the destruction and disintegration of the epithelium of the biliary ducts and gall-bladder.

4. Bilirubin-calcium, an insoluble compound formed by the union of bilirubin and the lime of salts, forms the nucleus of most of the stones formed in the gall-bladder.

5. Jaundice, ptomain poisoning and suppuration are late symptoms of cholelithiasis.

6. Dyspeptic symptoms, swarthy skin, uneasiness in the region of the gall-bladder (congestion of the liver), and loss of weight are some of the remote and local symptoms of the presence of gall-stones.

7. Inflammatory diseases of the duodenum and bile passages are the most direct causative factors in the production of gall-stones.

8. The surgery of these cases is especially difficult, and the inexperienced should not undertake it.

9. A ball-valve stone usually continues to give rise to symptoms until removed by surgical means.

10. Stones in the gall-bladder, producing septic symptoms, should be removed.—*Ex*.

THE BACTERIOLOGY OF THE VAGINA. In the *Archiv f. Gynäkologie* Kottman describes investigations to determine the presence or absence of bacteria in the vagina during pregnancy, and also the sorts of germs which are there present.

He found that in women who had not been examined, bacilli of various sorts are present in the vaginal secretion. The staphylococci found in these cases are identical with those found in other conditions. The streptococci resemble exactly those seen in septic cases, differing only in virulence. They become deadly readily after labor. Kottmann found it impossible to separate vaginal secretions into normal and pathological. He believed that no prognosis regarding the patient's recovery could be formed from this factor alone. Germs found in the lower portion of the vagina are more virulent than

those isolated from the upper part.—
*The American Journal of the Medi-
cal Sciences, August, 1898.*

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Notes and Comments.

THE IMMUNES ARE NOT IMMUNE.—The fact that a number of men, who had survived an attack of yellow fever, enlisted and went to the front with the full assurance that they could face the dread disease with impunity, have been attacked with yellow fever, and some of them even died from it, has put a new phase upon the significance of the word immune. It is quite possible that life in a northern climate so renovates the system after an attack of yellow fever as to interfere with the proper balance between the toxins and antitoxins, and so destroys the security against a second attack. If this proves to be the case, it will be necessary to secure an immune army from the ranks of men who have continued to live in a tropical or semi-tropical climate after the first yellow fever attack.—*Medical News.*

ANTITUBERCLE SERUM IN TUBERCULOSIS.—In the cases submitted no auxiliary treatment has been neglected (especially emphasizing the value of beechwood creosote by almost continuous inhalation and internal administration), but serum has proven to be an invaluable help. My records stand in round figures as follows: Total number of cases of tuberculosis of the lungs treated with anti-tubercle serum (Paquin) since January 1, 1896, thirty-five. Total deaths, five. Each of these cases came into my hands in a practically hopeless condition, apparent to the most casual observer. Total recoveries, eleven. By this I mean that bacilli have disappeared from sputa; healthy respiratory murmur has been restored; chest expansion increased from about one inch to two and one-half inches or more; flesh increased to about normal, according to height; appetites for meats restored, not despoising pieces of fat, etc. The patients look well, and, according to physical signs and symptoms, are well. Two other patients, who came

under my care after grounds for hope were gone, will die shortly. As to results in two other cases, well advanced in consumption, I am doubtful—to-day apparently improving; to-morrow worse, fluctuating in condition. Three or four other patients are holding their own, inclining to improvement, thus encouraging hope. The other patients are improving, and some, I believe, will recover.—By Landon B. Edwards, M. D., Professor of Practice of Medicine, University College of Medicine, Richmond, Va.

RARE CONDITIONS FOUND IN THE NEGRO.—According to the experience and observation of Dr. B. Merrill Ricketts, of Cincinnati, Ohio, the following conditions have been rarely found in the negro. Should any of these be found in that race, he requests information on the point—always being careful to state whether the subject or subjects were pure negro or partially mixed race. These troubles are often enough seen in the mulatto and those more nearly white.

1. Chorea.
2. Gall-stones.
3. Kidney stone.
4. Urethral stone or gravel.
5. Urinary bladder-stone.
6. Locomotor ataxia.
7. Club-foot (not parietic).
8. Lupus.
9. Epithelioma of the face.
10. Varicosity of scrotum.
11. Varicosity of legs.
12. Strabismus.
13. Amblyopia.
14. Hare lip.
15. Hypertrophied prostate.

The collection of such statistics is valuable as bearing on the question of race immunity; so that we hope our Southern doctors will put themselves to some trouble to furnish statistics on this subject to the Doctor. His street address is 413-415 Broadway, Cincinnati, Ohio.—*The Virginia Medical Semi-Monthly.*

HICCOUGH.—

℞ Potass. cyanid, 0.05.

Syr. morphin.,

Syr. flor. aurant., aa 75.

M. Sig. Teaspoonful every hour.
Robin, Semaine Méd.

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Original Communications.

SOME SUGGESTIONS ON THE SUBJECT OF RESTORATIVE AGENTS IN THE TREAT- MENT OF CHRONIC CATAR- HAL INFLAMMATION.

BY GEO. A. GILBERT, M. D.,
DANBURY, CONN.

ANENT THE usual crop of annual "Chronics," so abundant at this season of the year in the valley towns of old New England, we venture the assertion that not many of her winter productions have become more familiar, nor, perhaps, more harassing to the general practitioner than ordinary cases of inflammation of mucous membrane,—especially of the respiratory tract. In chronic bronchitis particularly, various methods of treatment have been tried only to be abandoned shortly, until finally the majority of busy physicians have learned to dread the appearance of this most common of fall and winter complaints. But whatever else in this class of cases we may decide to abandon as useless, it is highly important to keep in remembrance the precise nature and cause of the trouble in order that we may adopt a rational method of procedure.

An inflammation will, of course, persist as long as the cause of it remains, and in almost all chronic inflammations we are able to distinguish such a persistent cause. The presence of inflammatory products acts as the prime factor; i. e., the exudation not being entirely absorbed, a portion of it remains and operates as a foreign body in setting up inflammation around it. Inasmuch, then, as the restoral of a part to its normal condition is the termination

of inflammation which should be most eagerly sought, it becomes at once obvious that this "foreign body" should be removed and it is equally certain that the removal must depend upon the vitality of the tissue cells involved at the given point.

The condition of the individual, too, has much to do in determining the chronicity of inflammation. In some cases the natural vitality of the patient tends to throw off the disease, but it is only when he is well nourished; blood vessels illy nourished have not the same tendency to return to their natural condition. Hence, to arrest the abnormal process of inflammation, and enhance absorption of its exudation, it becomes absolutely essential that we improve the nutrition of the weakened walls of cells and blood vessels in the immediate neighborhood. In other words, such pabulum must be administered as will fortify the system as a whole, and create a resistant and recuperative power in the local tissues themselves. It is believed by many that malnutritions of various kinds are much better treated by foods than by tonics, on the ground that no medicine can manufacture vitality in a dying cell.

In any event, our first step is to determine what vital losses have been, and are being, sustained at the affected point, in order that such losses may be speedily restored; besides, too, serious local injury must ultimately result from constant drain. We know that wherever pathological tissue changes are taking place, *fat* accumulates and enters largely into the formation of the resulting products. Newly formed plasma contains much free fat, and, according to Lehmann, all plastic exudations as well. Moreover, fat is the most abundant constituent of

pus. In chronic bronchitis the sputum usually consists of pus, besides mucus, blood, portions of disintegrated tissue, and histological elements of neoplasms.

Hence it is manifest that in chronic inflammation of the bronchial mucous membrane, fat is being lost constantly and in no small quantity—together with much albumen of the blood. It is not surprising, therefore, that our winter "Chronics," who are gradually spitting their life away, should suffer loss of flesh and strength. In summing up, we are forced to conclude that albumen and fat are the chief restoratives indicated in cases of this nature.

In glancing over the list of remedies available, one is struck with the dearth of those appropriate for this specific purpose. Though cod liver oil is of inestimable value, nevertheless it fulfills but half of the requirements—furnishing only the fat. The seed of flax, however, contains not only the fat, but much albumen, and is, therefore, theoretically, a model reconstructive in such cases: its oil possessing in addition, a demulcent and lenitive action on both the respiratory and genito-urinary tracts. His long acquaintance with this latter fact induced the famous Greek physician and author, Dioscorides, to recommend injections of flaxseed infusions in chronic vaginitis.

During the past six years many cases of chronic bronchitis have been treated with marked success by the physicians of southern New England, with this homely but efficient agent. The only satisfactory preparation of it known to the writer is in the form of a compound emulsion of the refined oil, prepared originally a few years ago under the direction of Prof. W. H. Thomson, of New York; but since much improved and now familiarly known to the profession as linonine. The favorable result of its administration in the following case may be considered no mean argument for relying rather upon a standard reconstructive in the treatment of a recurrent or persistent bronchitis, than upon either one or all of the innumerable so-called "Cough Mixtures."

Mrs. R., housewife, aged 45, commenced treatment Oct. 2, 1897. An-

nually, at the end of every September or beginning of October for the previous nine or ten years, she had been attacked with a severe expectorant cough which invariably lasted until late in the ensuing spring, becoming less troublesome through the summer. She had lost at least twenty-five pounds from her normal weight, being reduced to 105 lbs.—and was pale and poorly nourished. The stomach, too, had become refractory through the much-taking of cod liver oil, in consequence of which its continuance had been interdicted, though it was the only remedy thus far that had given relief. She refused, however, to take more. Various *pro* and *anti*-"Cough Mixtures" had been tried by different physicians, with the usual negative (permanent) results.

At the time of examination the most distressing symptom was violent cough, especially on rising in the morning: the expectoration being viscid, profuse and of a muco-purulent character,—also, at times, bloody. Respiration was labored and noisy; appetite poor; bowels irregular, attended with some headache. Determining to rely altogether upon a restorative agent in this case, (one which should also have a demulcent action on mucous membrane) linonine was prescribed—with nothing else. Teaspoonful doses were first given, and subsequently increased to a tablespoonful, three times daily. Fresh air and wholesome food were recommended. Three months later, on Dec. 29, 1897, her general condition had noticeably improved; had gained four or five pounds in weight; cough greatly ameliorated, the sputa being mostly thin mucus.

The case was not seen again till recently, (Dec. 12, 1898) when visiting another member of the family. Mrs. R. reported that her cough gradually lessened and disappeared sometime during the preceding spring. She had continued with the medicine, however, throughout most of the summer, though entirely free from cough. She appears fairly well nourished and has accumulated some flesh; appetite improving and bowels more regular. Notwithstanding its being now three months overdue the cough has not yet appeared, nor,

judging from a brief examination of the chest, is it at all likely to.

The next case, of which we append a brief extract, is no wise remarkable, nor does it come under the category of winter "Chronics," yet it is interesting as being further illustrative of the salutary results that may accrue from the administration of a proper reconstructive in even one of the most inveterate of the chronic catarrhs.

Mrs. G., housewife, aged 43, mother of three children, was first seen April 5, 1898. For ten years she had complained of leucorrhœa,—also backache, headache, lassitude, and of becoming easily fatigued. During the latter half of this period her treatment consisted of warm water vaginal injections containing sulphate of zinc. Examination revealed an abundant glairy discharge from the vaginal walls as well as from the uterine cervix, but principally from the former source. There was no displacement nor appreciable laceration. The only determinable cause of the trouble was an habitual constipation. The patient also laced tightly; took insufficient outdoor exercise; and was slightly anæmic.

Constitutional and local treatment were both decided upon. The first consisted simply of tablespoonful doses of the emulsion of linseed oil, in the form of linonine, three times daily, for an indefinite period; one of the natural mineral waters being prescribed for the constipation. Locally, a vaginal douche of warm flaxseed infusion containing boracic acid was directed to be used morning, noon and night. Nutritious diet, fresh air and larger corsets were also recommended.

On December 12th, the patient stated that, with the exception of an occasional injection, the treatment had been discontinued on October 1st—six months after consultation—at which date the discharge had practically disappeared, as well as the backache and headache. Her general physical condition is decidedly improved; bowels fairly regular, requiring physic at only rare intervals. This patient is much elated over her recovery; possesses a much more amiable disposition than formerly, and is in a fair way to pass the menopause in a manner intended by nature.

"ON PHYSICAL EDUCATION."

CHARLES P. ROBBINS, M. D.,
WINONA, MINN.

ARTICLE I.—"EXERCISE."*

"**H**EALTH is the vital principle of bliss." "Nor love, nor honor, wealth, nor power, can give the heart a cheerful hour when health is lost. Be time wise; with health all taste of pleasure flies."

We are in the age of critics in its best philosophical sense. Man tries to account for and classify the phenomena of human energy according to the causes that produce and the laws that govern them. Ours is an age of exact reasoning in contradistinction to other ages which substitute hypothesis for principle and beliefs for knowledge. The very mode of reasoning is changed. Not like the meta-physician or the mystical philosopher of old, man to-day starts with that which is known to the senses and the collective experience of the race. He deducts the principle, according to which the origin, character, existence and distribution of the known is governed. He connects cause and effect in their respective relations. In ages gone by the logical order of things was reversed. Philosophy of those days was the humble handmaid of theology, instead of being its queen. Our age gave us the analytical study of nature as to cause and effect.

The racial, social and political environments of mankind were effected by the change in the process of evolution. The changes which were instrumental in bringing about this intellectual evolution may be briefly pointed out. The history of civilization begins as periods, which were portrayed by the peculiarities and characteristics of the race, nation or country that held intellectual sway.

The Hellenic age was pre-eminently a period of æsthetic intelligence. The Grecian age, one of poetry and artistic sense, even to its philosophers and sophists, as Aristotle, Thales and Plato. The Roman age was less emotional, but more analytical, and therefore produced better logicians. The falling of the Roman empire, succumbing to the

*The Salutary Ingredients of life: Article 1.—Exercise. Article 2.—Diet. Article 3.—Bathing. Article 4.—Clothing. Article 5.—Rest, to be followed in succession. Last, Article 6.—Physiological Methods.

Northern tribes of Europe, and the spreading of Christianity, gave intellectual growth a new impetus. This reaction lasted throughout the Middle Ages, and gradually evolved the analytical sense. The Reformation, the French Revolution, awakened mankind still more to freedom of thought and action. Thus the Germanic or Anglo-Saxon tribes took up what the slow but progressive Romans left off. All paths of human action are subject to-day to this critical sense. Nowhere is this more marked than in those branches of investigation that pertain to the phenomena of life; science dealing with its preservation, physical education has achieved marvelous results, through exact and analytic critique.

Education was formerly considered purely a brain culture, as if the mind depended entirely upon the brain as a distinct and separate part of the body. But as the growth of the intellect depends upon the development of nerve, muscle, viscera, and other organs as well, the term education has a broader significance. Notwithstanding that it is now well understood that the growth of the mind, as well as the health and strength of the entire system, depends on the symmetrical development of the body as a whole. "Physical Education" is still subservient to mental culture, instead of being the fundamental and necessary part of education. It is evident that a sound mind requires a sound body.

The importance of physical education as a part of the scheme of universal education is becoming more generally recognized by our institutions of learning, but its entire import does not seem to be at all fully grasped by the masses. There seems to prevail among physical educators a disposition to defer the application of the principles of their doctrine until the subject has attained a certain age, and to thrust the responsibility of earlier training upon nature. True, indeed, that great mother affords the basic teaching and gives the child a disposition to romp and play in a manner that produces the exercise that is necessary to the healthful body.

We may briefly trace the rôle that exercise plays in the principal per-

iods of development. We are constantly discovering and evolving practical ideas for the furtherance and enlargement of the principles of physical education. But the fact is obvious, the work mainly advances along the branch of adults. There can be no doubt what should be comprehended by the term "Physical Culture." It certainly means the training and cultivation of the body, and can not begin too early in life. From infancy to senility exercise plays the most important part in the healthful advancement of the race.

"Better to hunt in fields for *health unbought* than fee the *doctor* for a medicated draught.

The *wise* for cure on exercise depend; God never made *his* work for *man* to mend."

Permit me to extend observations a little earlier. Many conditions are identical with those surrounding forestry, and probably the most important consideration is the fertility and adaptability of the soil. When the stripling begins to grow great care is *exercised* to guide it right by the gardener. So, also, the horse trainer would never think of taking the colt of a lazy cart nag to develop it into a race horse. On the contrary, he is particular as to the animal's pedigree. In order to make a strong and healthy race, the progenitors should be strong and healthy. The principles of this science cannot be applied too early. The aim of physical culture is to produce strong, symmetrical, active men and women. The methods of training should be applied to human beings with good advantage and salutary results.

Then comes the period of infancy. Practicing constant and vigorous movements, superficially aimed, but important in producing tissue change, fundamental to nutrition, as well as furnishing sensory and motor impressions. All the crying and kicking and purposeless movements aid in its development and growth. Strong and healthy organs are not developed when the spontaneous activity of the baby is habitually restrained and repressed by its over-coddled and over-draped enshrinement. By an inborn impulse nature has provided for movements. At three months of age it finds its hands

and begins to reach out for and hold objects; at eight and nine months it creeps; at twelve and fourteen months it begins to walk; and so progresses from simple to complex purposive movements, and to such adjustments as put it in more comfortable and intimate relations with its surroundings. Since the infant has such ample endowment and spontaneous impulses to activity, our first and most important care must be to avoid undue interference or repression. They will attend to their own gymnastics if left alone. It is evident that the trunk and limbs should not be impeded with too much wrapping. The health and growth of the infant will surely follow when it is once grasped that a hearty cry is a good chest expansion and that over-indulgence brings indigestion, and should be tempered with discipline.

The period of childhood in regard to exercise is shown by romp and play, which is a spontaneous and joyous exercise of budding power and in which motor activity, imitation, fancy and social instinct are deftly interwoven. This play of children furnishes not alone amusement, but priceless mental and physical training. The child is practicing muscular experience in order later to select the chord and arrange the harmony. The dominant factor is a place to play in and children to play with. Special attention should be paid to this informal motor education of the child, which is the most plastic period of life.

One of the wisest of men has truly said: "He who helps a child helps humanity with a directness, an immediateness, which no other help given to human creatures at any other time of their lives can possibly give again."

Then the period of school age, with its conventional standard and more restriction, essential, no doubt, but rendering all more imperative the relaxation of recess, the recreation of the playground and the freedom of out of doors, into which play, games and varied sports materially enter.

At this time of life we are brought face to face with systematic and formal training, namely, some kind of gymnastics. Here a coherent plan,

modified to suit particular circumstances and conditions, is essential. Means must be varied to suit age, sex, race, social and other conditions. No formula will answer for all.

And last, after the school or child age, comes the college or adolescent years. Here it is that the modern physical educator usually begins. Physical training is here placed on as scientific a basis as can be well demonstrated in all fields of muscular achievement. And it is well it should be. The human form is shaped for activity; under habitual inaction it degenerates, while under right use nerve, muscle, mind and body are trained to economy and efficiency. Here development and growth blossom by symmetrical exercise, an adjunct to nature's spontaneous impulses. The principal effects of exercise on the system, symmetrically engaged in, are as varied as they are beneficial.

First.—In regulating the circulatory system; the circulation of the blood and lymph is greatly influenced by muscular action. The skeletal muscles press the blood through the veins more rapidly. Its progress towards the heart is greatly accelerated. The blood is thus aerated and the waste particles carried off faster, tone given to the circulatory system and an unbalanced circulation returned to its normal condition.

Second.—Systematic exercise increases secretion and excretion. When there is a great diminution in the eliminative and secretory organs, as the skin and liver, when they are dormant.

Third.—To increase respiratory power, people have been able to treble their breathing power in three weeks with systematic respiratory exercise. The lungs with their bronchii and blood vessels are mostly muscle and functionate like the digestive organs only through muscular activity. The breathing exercises which are the most natural are those that are the result of muscular activity. Not alone is the expansive power increased, but a greater amount of oxygen is carried to the general system, bathing every cell with its life-giving element, producing a more rapid and abundant outflow of waste products as well.

Fourth.—To increase digestion. Muscular activity often stimulates deficiencies of muscular and digestive power of the stomach and intestinal canal. "Now good digestion wait on appetite and health on both."

Fifth.—To increase assimilation. Imperfect assimilation produces many functional disorders. It is not what we eat, or what we digest, that benefits us, but what we assimilate through the tissues. Gymnastic exercise, Swedish movements, out of door sports, stimulate and encourage assimilation.

Sixth.—To increase vital action. Inactivity of vital function by its means (exercise used rightly) develops the living cell to greater action, thus increasing its functional activity.

Seventh.—To regulate muscular action. The daily work of the blacksmith develops and strengthens the muscles of his arms and trunk. The work of the farm hand calls into action all the muscles, but some sets more than others; the drill of the dancer those of the limbs; the practice of the boxer those of the arms and chest. In most cases some part of the system becomes over-developed while other parts equally important lag in growth and vigor. It should be the aim to establish a uniformly well developed body by systematical exercise of the muscles.

Without enumerating the unconscious exercises of the infant, the sports and plays of the child, the romps and games of the school age and the athletic achievements of the adolescent, it may be said that just as long as mankind is endowed with the faculty of emotional expression, so will its demonstration in various forms continue to manifest itself. As a rule people must and will divert and amuse themselves and nobody can prevent them. But in these days of excessive drive and over-pressure, when undue waste of vital energy shows itself to the clinical observer in the way of various nervous and brain diseases, the question of averting and mitigating it becomes a serious problem. The solution lies in physical culture; in encouraging the proper proportion between the salutary ingredients of life, diet, rest, clothing, bathing and exercise. If

we want to keep up the spirit of Robin Hood and the Vikings, the ballistic element must enter into our pastimes. If we should hold the trident of Neptune and have a long run on the political stage: "The man behind the gun as well as the political ruler will be none the worse for having been trained in the manly school of exercise as a factor of physical education." We should do all we can to further the cause of innocent sport and recreation; to bring together men and women during leisure hours at such places as engage healthful enjoyment. In the light of more humanistic ideals of the present days, we do not admit the ethical cogency that such amusements are wrong because they are worldly. We should strive to meet people with a simple word or two expounding the gospel of relaxation with a view of making life better and human action abler when prompted by the two great motor forces of life which incite in us the sources and spring of all human action, namely, the preservation of the individual and the continuance of the species. It should be the aim generally to produce sound bodies, but the term physical culture, though implying training for the physical only, has steadily broadened until to-day its highest interpretation has come to mean a systematic and harmonious development of the entire individual in a physical, hygienic, intellectual, physiological and æsthetic sense from the critical age we live in.

A system of physical culture to be valuable in this acceptance of its meaning must be founded on the recognized relations of mental and physical forces. Its aims and methods must be physiological, defining and training the entire muscular system; hygienic, exacting and conforming to the laws of health; intellectual, encouraging clearness of perception and the power of mental concentration; physiological, developing consciousness, will, self-command, sympathy and affection, and directing them into their natural channels of expression; æsthetic, as the inevitable sum of these results, refining the taste, giving directness and energy to action, grace and beauty to movement. And with these results

attained, the bloom of life will become a living reality.

"Life is a journey; on we go, through many a scene of joy and woe." It is not a dreary waste; on the contrary, it is full of joy and beauty, and to the strong reliant soul who has faith and hope it is full of goodness; but beauty must be in the body as well as in the mind.

I close with the hope that each of us may become "A perfect being, nobly planned, to warn, to comfort and command; and yet a Spirit, still and bright, with something of angelic light."

RECTAL ALIMENTATION.

BY L. H. WATSON, M. D.,
CHICAGO, ILL.

IN THE progress and development of the medical art in the past ten or fifteen years, the bright and active minds of those men intent upon prolonging human life, and giving every man a "fighting chance," have been turned toward rectal feeding. But little has been written on the subject in our journals, although the text-books in certain cases where stomach feeding is barred, advise nutritive enemata. Every physician is supposed to have knowledge and intelligence enough to suggest the appropriate combination of alimentary substances which shall nourish the patient until mouth feeding be possible. Rectal feeding is certainly not new. We can go back to Dr. Rammazzini, an Italian physician, who used this method in 1691. This is about the first record we have of any attempt being made to sustain life by introducing food into the rectum. It seems to have fallen into disuse, and to have been mainly revived by such stomach specialists as Von Leube, Ewald, Boas, Rosenthal, Kussmaul and others. There are certainly many occasions when it is impossible to introduce food into the stomach. In cases of ulcer, gastritis, carcinoma, stricture of the esophagus and pylorus, obstinate vomiting, erosions of the stomach through the action of corrosive acids and alkalis, and many others, we are absolutely debarred from feeding in the ordinary way.

The rectum suggests itself as a convenient receptacle for food, and has been, and is constantly so used. To what extent we do nourish our patient in this way, opinions differ. Some physicians absolutely deny all absorptive action to the lower bowel. Dr. Maxwell, of New Castle, Delaware, is one of these. In an article contributed to a medical journal¹, he utterly denies that any absorptive action can take place in the lower bowel. Dujardin Beaumetz thinks the therapeutic action of rectal food injections illusory. Von Voit and Bauer² state, from their experiments, it is impossible to nourish a human being, or any animal, exclusively through the rectum. Czerny and Latschenburger³ made experiments upon sections of the rectum through fistulous openings and deny its absorption power. Others, like Dr. Campbell of Georgia, claim the benefit derived is not through rectal absorption, but have suggested a new hypothesis. Dr. Campbell insists upon the permeability of the valve of Bauhin, and cites cases of suppositories, colored solutions—and even a piece of tallow candle—which have passed the ileo-cæcal valve and been vomited. Grützner⁴ is the latest exponent of this view, claiming to have found injections of colored starch in the stomach. He recalls the experiment of Nothnagel,⁵ who found a normal salt solution colored with carmine, extending to the stomach. Christomanos, however, another pupil of Nothnagel, found injections of lycopodium and Prussian blue did not penetrate beyond the valve of Bauhin. One of the most interesting experiments was that of Swiezynski, under the supervision of Riegel of Giessen. He introduced lycopodium solutions, colored and uncolored, into the rectum in six cases, combined with salt, and in one case he omitted the salt. The subjects were prepared by fasting for ten hours or more, and then the stomach was washed out and a cleansing enema introduced into the rectum. Afterwards the colored and uncolored solution of lycopodium was used, and in all cases except the one without salt, evidences of the presence of lycopodium were found in the stomach under the microscope.

The journals are filled with cases of persons whom physicians have fed for months per rectum. Dr. A. H. Smith⁶ reports the case of a man who was nourished fifty-four days by the use of rectal enemata. Dr. Wright⁷ reports a case of cancer of the stomach nourished five months. Daremberg⁸ reports the case of a man of fifty-three, sustained fourteen months solely with nutritive enemata of wine and water, decoctions of meat, with eggs, etc. These enemata were peptonized. Professor Lepine⁹ treated three cases of hyperchlorhydria with permanent secretion, by rectal feeding, very satisfactorily; although he remarks that Grützner's ingenious hypothesis of retrograde transportation of fine alimentary particles is not tenable, not having been proven. Despite the length of time rectal feeding has been in use, the absolute testimony of numbers of the most competent observers, and the careful and painstaking experiments of the physiologists, we are at the present time entirely in the dark as to the digestion—if digestion really does take place—of the food products introduced into the large intestine. The colon is entirely destitute of villi and lacteals; there are no glands in the large bowel secreting digestive ferments, although bacterial digestion has been suggested by some. Nature has constructed the large intestine as a sort of receptacle for excrements after all the nutritive properties have been extracted from food. Skatol, indol and toxalbumens abound in the large intestine, and were they taken into the blood stream in more than moderate quantities toxic poisoning would ensue, and yet it is unquestionably the fact that if the stomach were ligated at its pyloric orifice, and nutrition attempted only through absorption proper in that organ, life could not be sustained one-quarter of the time it could be through rectal feeding. In fact the person upon whom it was attempted would starve. Water is only slightly absorbed from the stomach, and freely by the rectum. Peptones are absorbed only in moderate quantities, not nearly large enough to sustain life. Alcohols, through diffusion, rapidly, and upon these we must depend in such an experiment.

Whereas from the rectum, peptones and albumoses disappear as such, nor do we find them in the blood stream or liver. Hoffmeister has shown that the stomach of an animal removed from the body and kept warm, would cause the transformation of albumoses and peptones. Into what body they are transformed is not known. There is, therefore, practically no difference between the action of the stomach and the action of the large intestine in disposing of peptones. Real absorption, the absorption which sustains life, takes place in the small intestine. It is there the action of digestion proper is accomplished. It is there the food products mixed with the ptyalin ferment of the saliva, triturated and disintegrated by the gastric juice, mingled with the bile, pancreatic secretion, the juices of the glands of Brunner and Lieberkuhn, and so prepared and chemically changed, are sucked up by the lacteals of the villi, and pass into the blood as nutrients.

Rectal feeding is a makeshift, but according to our present light at least a valuable one. Whether alimentation takes place through absorption from the large intestine itself—and Chittenden¹⁰ tells us that the diffusibility of peptones through the membrane of the bowel is very great, or whether real digestion takes place as Grützner insists, in the small intestine through anti-peristalsis in the bowel and the permeability of the valve of Bauhin, we do not know. Life is certainly prolonged in many cases. In ulcer of the gastric mucosæ, hyperchlorhydria, and dilatation, rest at least is obtained, while the patient is partially nourished. The use of rectal enemata has also been advocated in typhoid fevers, thus lessening the amount of irritation necessarily inflicted upon ulcerated Peyer's glands while the patient is really fed. Leube, one of the first to urge rectal feeding, uses the following formula. Take five ounces of finely scraped meat, chop it still finer, add to it one or two ounces of chopped fresh pancreas and three ounces of water, then stir to the consistency of a pulp, and after washing out the bowel, inject well up. Ewald has another which he extols. A pinch of the best flour is cooked in

half a cupful of a twenty per cent. solution of glucose, two or three eggs are beaten up with a tablespoonful of water, and a wine glass of claret added. Stir this into the cooling flour and glucose solution, taking care that it be not hot enough to coagulate the albumen. Huber¹¹ improves on this by adding one gramme of salt to each egg. Unquestionably the addition of salt favors dialysis. Eichhorst¹² has published his experiments with, and without the use of salt, and finds a larger amount of urea excreted by the urine when salt is used.

Somatose, an alimentary substance containing besides water and salts, 78 per cent. of albumose and 24 per cent. of peptones is very useful as an enema on account of its richness in albumen, four times as much as meat. An enema of somatose in salt water is said to relieve the feeling of hunger and faintness at the stomach. Ferro somatose can also be used—being practically an iron albuminate—in cases of anæmia and chlorosis when ulcer is suspected. Although rectal feeding is, and will be used when mouth feeding is impossible, it is unphysiological, and its utility is questioned by clinicians. The first thought of the patient and friends, when told that it is impossible to feed by the stomach, is that he must die. But when assured that he can be fed by nutritive enemata, at least peace of mind is obtained, and the physician has time for reflection and consultation.

Many persons for exhibition purposes have gone without food for two months or more, and it is a question to be hereafter decided when the patient is in a fairly good physical condition as regards fatty tissue, if we cannot sustain life equally well with intra-vascular and intra-venous normal salt solutions or at least saline enemata without the use of food either peptonized or otherwise prepared, and introduced into the rectum for the purpose of nutrition.

In only one case have I had an opportunity to test the use of saline injections. Mr. M—, a man of 55 years of age, had an ulcer of the stomach, with all its characteristic symptoms, pain, vomiting of blood and distress after taking the slightest amount of

food. Mouth feeding was stopped entirely, and three, and sometimes four injections of salt water, a litre to each injection, were used daily for ten days. He was allowed to suck ice occasionally to relieve thirst. The loss of flesh was not excessive, not more than 12 pounds, possibly a pound or two more. Mouth feeding was resumed, and he was perfectly cured of his ulcer. After the first two days he did not complain particularly of hunger. I must admit, however, he thought he was having beef tea, for the injection was colored with caramel.

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100 STATE STREET.

SCRAPS FROM MEDICAL HISTORY.

A FEW STRAY LEAVES FROM OLD MEDICAL WORKS.

BY FRANKLIN STAPLES, M. D.,
WINONA, MINN.

BOOK notices and reviews generally refer to and advertise new publications. This brief writing does neither; but may perhaps claim a small place in some department of medical history. The writer has at hand a few old medical works, some of which were published more than a century ago, and some of whose earlier editions first saw the light in more ancient times.

Hippocrates.—The first book is a small volume of a hundred and sixty-nine pages, stained and yellow from age, the title of which reads as follows: "The Aphorisms of Hippocrates, from the Latin version of Verhoofd, with a Literal Translation on the Opposite Page, and Explanatory Notes. By Elias Marks, M. D., Member of the Physico-Medical Society of New York. Printed and sold by Collins & Co., No. 189 Pearl Street New York, 1817." A note follows, showing that the publication was made by request of the Physico-

Medical Society. The work is dedicated to Stephen Elliot, Esquire, President of the Literary and Philosophical Society of Charleston, South Carolina, "as a tribute of respect for his literary and scientific talents, by his obedient servant, the author."

Dr. Marks, the author or editor, presents, as an introduction to the work, a short chapter on the life and writings of Hippocrates. The following extract from this introductory chapter gives the philosophy of Greek medicine in the Hippocratic period. It reads as follows: "He supposes a principle, the '*phusis*', which pervades the material creation, and which serves as the motive power of elementary matter. This principle is the cause of animal life and motion, and through it the blood and spirits receive heat, life and sensation." "It will be perceived," says the editor, "that the '*phusis*' of Hippocrates is the '*Archeus*'—the '*vital principle*'—the '*sensorial power*'—the '*excitability*'—and the '*Vis Mediatricis Naturæ*' of succeeding writers." Dr. Marks objects to the doctrine, which he refers to the Dogmatic Sect, of which he—not altogether correctly—makes Hippocrates the founder. He says, by this, "the symptoms of disease were so many preservative efforts of the *vis mediatricis* to throw off the morbid matter, after being duly concocted." Further he remarks: "We may trace the spirit of this erroneous doctrine through successive ages down to our own time. It was maintained and defended by the illustrious Sydenham, though very little influencing his practice; and forms, at this day, the basis of the theory of the French school. Its tendency in medicine, like the doctrine of predestination in ethics, goes to paralyze every intellectual effort; and its adoption by the most scientific nation in Europe can only be ascribed to that classical mania which measures every species of excellence by a Greek and Roman scale."

A feature of the dogmatic medicine of the Greeks was a tendency to place reasoning, or what was called reflection, before observation and experience in the study of disease. It was the idealistic in preference to the realistic in science. The follow-

ing aphorism, which appears as the first in the book, and which has been often quoted, is suggestive. It reads: "Life is short, art long, occasion brief, experience fallacious, judgment difficult. It is requisite that the physician exhibit what is essential, and that the patient, attendants, and all which surrounds him concur therein."

Sanctorius.—Notice of an old book entitled "The Aphorisms of Sanctorius," comes next in order. It is edited by John Quincy, M. D., and printed in London in 1728. The Italian physician, Sanctorius, (Santorio) was born at Capo d'Istria, Italy, in 1561. He became a professor at Padua and later a practitioner in Venice. He is mentioned as the leading exponent of the mathematical or mechanical school of medicine, which had been founded principally by Borelli of Naples, who taught in different schools in Italy in the middle of the seventeenth century. It was in the time of the gradual advance from the hypothetical method of explaining the phenomena of life, and of accounting for disease, to that of physical investigation and demonstration. The teaching of the Iatro-mathematical school was in the line of this movement. The motto of Sanctorius, which appears in the title of his book, was "*Pondere, mensura, numero, Deus omnia fecit*" (God makes all things by weight, measure and number). The introductory chapter of this book of Sanctorius begins under the following heading: "Of mechanical knowledge and the grounds of certainty in physick." He says: "Physical writers of late have with a good deal of industry and success, introduced geometry into their studies, and have endeavored to account for all that concerns the animal economy upon mechanical principles."

Boerhaave.—The eclecticism in medicine taught by Hermann Boerhaave at Leyden early in the eighteenth century, as it includes the so-called mechanical medicine, requires brief notice here. The book at hand is a small volume of "Boerhaave's Aphorisms, Concerning the Knowledge and Cure of Diseases, London, 1755." The author's preface begins as follows: "You have here a book, though

small in bulk, yet weighty as to its contents, and whose birth is due to no small Labour. It promiseth rules, by which you may unfold the causes of diseases, and assist nature in carrying them to their issues. The industry of the ancient Greeks, the diligence of the succeeding Arabians, and the exactness of a few among the late moderns, have supplied us with experiments altogether necessary to the finishing of this work. But anatomy and mechanics, both better and more universally understood in our days, have laid the foundation and spun the thread of our reasonings; both of them sure, whatever some ignorant or invidious men may clamour." This clause in the author's preface is mentioned in a note as written for the especial benefit of one Dr. Le Mort, also a professor at Leyden, "who wrote a very foolish libel in a very scurrilous style against the mechanical method."

What constitutes "a true physician," and the kind of investigation required in the diagnosis of a case, is given in No. 13 of the aphorisms, as follows: "He who doth, with the greatest exactness imaginable, weigh every individual thing that shall or hath happened to his patient, and may be known from the observations of his own, or of others, and who afterwards compareth all these things with one another, and puts them in an opposite view to such things as happen in a healthy state; and lastly, from all this, with the nicest and severest bridle upon his reasoning faculty, riseth to the knowledge of the very first cause of the disease, and of the remedies fit to remove it; he, and only he, deserveth the name of a true physician."

Sydenham.—Two volumes (different editions) of the works of Thomas Sydenham are before me. The older of these two books, edited by John Swan, M. D., was published in London, "printed for E. Cave, at St. John's Gate, 1753." The later volume is the edition of Sydenham by Benjamin Rush, published in Philadelphia in 1809. It is probably true that the name of no physician has had a higher place in the mind of the English-speaking people of the world than that of Sydenham (1624-1689). He has been called the Eng-

lish Hippocrates. He lived at a time when pure theory and hypothesis, as the means of scientific investigation, were yielding to the more substantial means of physical demonstration.

Dr. Rush dedicates his edition of Sydenham to his students in the University of Pennsylvania. In his letter of dedication, while he extols the work which he presents, he points out what he designates as nine important errors in doctrine and method, found in the work, the last of which mentioned is the author's "belief in the exclusive benefits of experience, and his rejection of theory or reasoning in medicine." It happens, however, that in the light of later medical science, the most of these so-called errors have become established as enduring truths; and in this, Sydenham of the seventeenth century is preferred to Rush of the eighteenth. The attempt of Dr. Rush to turn even the errors of Sydenham to advantage, has at least the merit of ingenuity. He says: "Let not the advocates of the fame of Dr. Sydenham complain of the number of the errors in his writings, which have been, or which may be mentioned. They were, perhaps, wisely permitted to restrain pride in intellectual gifts and attainments, and to console the physicians of succeeding ages for his singular pre-eminence over them in every department of practical medicine."

A few other medical works of the eighteenth century are reserved for future notice. Cullen's "First Lines of the Practice of Physic," and his "Treatise of the Materia Medica," in two quarto volumes; Antonio Scapula's "Practical Observations on the Principal Diseases of the Eyes;" "Physiological Researches upon Life and Death," by Xavier Bichat; "The Principles of Surgery," by John Bell, Abridged by J. Augustine Smith, and a few other works of the time, have an interest at present in showing something of the status of medicine and surgery a hundred years ago, and as the works of the teachers of the pioneer physicians of this country. In this connection the names of a few early American physicians, who were students at Edinburgh, London or Paris in the latter part of the eighteenth century, may appear.

THE CAUSES OF INSANITY.

BY PHILIP ZENNER, A. M., M. D.,
CINCINNATI, OHIO.

Lecturer on Diseases of the Nervous System in the
Medical College of Ohio.

Read before the Miami Valley Medical Society, Nov.
1, 1898.

GENTLEMEN: The subject upon which I have been asked to read to-day, is, indeed, an old one, but yet so important that it may not be without profit to present it for your consideration.

Insanity is supposed to be, essentially, a disease of civilization. To what extent it has occurred, and occurs, among primitive peoples cannot be determined with any accuracy; certainly far less than with us. Statistics seem to prove its rapid increase in our own day. But such observations are largely delusive, for they are based chiefly on the number of inmates in public and private asylums, and this increase in number is due to the multiplication of asylums, the greater readiness to resort to the same—which brings many insane out of hiding—and the prolongation of life through better treatment, which increases the number of old people and, thereby, the sum total of the insane.

It is still possible, as is generally believed, that there is an actual increase of insanity, for some great causes seem to be acquiring a greater influence; for instance, cities grow more rapidly, factory life is becoming more prevalent, the struggle for life is getting fiercer, syphilis more widespread, etc. There is no doubt that some mental disorders, notably paresis, have increased in recent years.

At the same time there is a growth of other influences that tend to lessen disease; improved hygiene, better food, clothing, dwellings, etc.; also greater security, as well as greater sense of security, as regards epidemics, war, famine and the like.

Insanity is found at all periods of life. To a certain extent the etiology is characteristic of the period. The mental disease of childhood is rather that of mental arrest, varying from slight imbecility to profound idiocy. Its basis is usually structural disease from inherited or other congenital conditions, or the accidents or diseases of birth and infancy.

The insanity of puberty and the climacterium occurs mostly in predisposed subjects, that predisposition being most commonly an hereditary taint.

The mental disorders of old age, like those of childhood, have usually a structural basis; in this instance disease of blood vessels, or changes in the brain. In adult life, the age most prone to mental disease, the latter is chiefly due to extrinsic conditions, alcohol, syphilis and the excesses and trials of life.

Both sexes are about equally attacked, though there is some difference as to the most effective causes in each. The changes of puberty and the climacterium are more frequently disastrous to the female than the male. The former has also to contend with pregnancy, parturition and lactation, as well as, oftentimes, a life with little aim and purpose. In the male we find more commonly alcohol, tobacco, syphilis, sexual excesses and abuses, while he must usually bear the brunt of the struggle for existence.

HEREDITY.

When we come to special causes, we must place at the head of the list heredity. It is so difficult to elicit facts as regards hereditary taint, on account of the desire to conceal them, or ignorance on the part of the family or patient, that there have been great discrepancies in statistics on the subject. The proportion of the insane who have an hereditary taint has been estimated all the way from 10 to 90 per cent. We will probably not go far amiss if we put it between 30 and 40 per cent.

The disease may appear in the same form in parent and offspring; in fact the resemblance may be so great that even the same ideas and delusions reappear. A striking instance of this order is the frequent occurrence of suicide in a family, the separate acts often at a distance in time and space, and apparently independent of each other. More frequently the disease is not alike in different generations. For instance, epilepsy in the parent is followed by brain disease in another form in the offspring. In the same way different forms of insanity, alcoholism, epilep-

sy and other nervous diseases, tuberculosis, etc., become related to one another.

Morel formulated a law of progressive degeneracy, according to which light nervous or mental troubles in the first generation are followed by gradually more profound mental disease in the second and third generations, and, finally, by idiocy and sterility in the fourth. But such a typical history is rarely found. Usually there are changes for better or worse from one generation to another, according as an admixture of healthy blood, or other favorable conditions, come in on the one hand, or alcohol, crime, or other unfavorable conditions come in on the other.

The manner of transmission of disease varies also. The hereditary taint may consist of actual disease, or merely a predisposition to it. In the first instance structural changes may or may not be detected. But there is, at least, some pathological state of the nervous system, manifested from infancy by peculiarities of character and the like. Such a condition is usually the foundation of certain forms of insanity, notably paranoia and moral insanity.

The predisposition to disease probably consists of an inherent weakness in the organism, a lessened power of resistance, which renders it a prey to disease where a normal nervous system would escape. Doubtless many individuals with such heredity pass through life unscarred, because they have never been subjected to specially injurious influences. Again this class is often attacked by mental disease at puberty, the climacterium, in childhood, after infectious and other diseases, and succumbs the more easily in mature years to alcohol, syphilis, psychic disturbances, excesses, etc.

The likelihood of transmission of disease is greater if both, than if only one, parent is affected, and greater when the disease occurs in the parent, than when only found in more distant ancestry. The likelihood of transmission depends also on how deeply rooted is the disease in the parent's system. An acute attack of mania or melancholia in an otherwise normal being may have no effect on the offspring, whereas much

more trivial manifestations, as nervousness, and peculiar traits of character, which are, as it were, a part of the individual's nature, will very likely leave their imprint.

Epilepsy in childhood is likely to stamp the nature of the individual and mark the offspring, while the same disease occurring late in life may leave the offspring unscathed. The more frequently a disease has occurred in the ancestry the more deeply rooted it is likely to be in the individual and, therefore, the more likely its farther transmission.

Such facts should be borne in mind by the physician when he is consulted on the subject of marriage. The much mooted question, the effect of the marriage of cousins, is influenced rather by whether or not there be an hereditary taint and if so its degree on each side, than the mere fact of consanguinity.

In connection with transmission of disease I will mention the bad effects of alcoholism, or other abnormal states, at the time of procreation, and of disease of the mother during pregnancy.

OTHER PREDISPOSING CAUSES.

In addition to heredity, often in conjunction with it, we find many other predisposing causes of disease. Convulsions and intra-cranial inflammation in infantile life, trauma in childhood as well as before and during birth, other diseases of intra-uterine and infantile life, though at the time they may have terminated in apparent recovery, are likely to have left their stamp on the individual, a predisposition to future disease. The predisposition may also be acquired through the manner of life, the training of the child, etc. Our systems of education are, doubtless, responsible for not a small part of the ills of later life. It is especially unfortunate that children of weakly nature and with hereditary taints should be subjected to the same school discipline as those with vigorous constitutions.

Perhaps we should look upon an attack of mental disease as creating a disposition to the same. At least recurrences are common. I have quite a number of individuals under observation who have had repeated

attacks. In some the interval of health was as much as ten years. In all the period of health was too long to look upon their cases as a continuous disease with intervals of apparent health as occurs in circular insanity.

PSYCHIC CAUSES.

Among the most common exciting causes of insanity are psychic disturbances. These are usually painful and depressing emotions. Joyful emotions rarely do harm, nor is overwork in itself a cause of mental disease. It is only when accompanied by continual worry, or the like, that it finally causes a mental breakdown, perhaps insanity. One of the most injurious causes of this kind is grief, most commonly that for the loss of husband, wife or child. Almost equally disastrous is disappointment, especially if it follows a long period of emotional strain, and is attended by a sense of mortification or humiliation. Such causes are especially effective if cherished in secret, for tears and wailing are an external discharge which do much to lessen internal danger.

It is, usually, the long continuance of mental pain, the ceaseless grief, the cankering care, which finally leads to mental disease. More rarely the great intensity of the emotional state, fright, terror or the like, causes a rapid outburst of the disease. In all instances mental causes are more disastrous where there is a predisposition to mental disease.

TRAUMA.

Among the causes of insanity trauma takes an important place. As already stated trauma during uterine life, in the act of delivery and in infancy, produces pathological states of the nervous system, which predispose to insanity in later years. How often it produces insanity in mature years is not very clear. Doubtless it is often assigned as a cause without reason, and, again, may have escaped recognition altogether when pronounced symptoms first appeared long after the trauma occurred.

The immediate cause of the disease is usually a structural lesion, as fracture of bone, injury and inflam-

mation of membranes, hemorrhages, etc. Of most consequence is the disturbed circulation of the cortex and impairment of its nutrition. Often mental disease follows comparatively slight injury of the head, or is a part manifestation of what is spoken of as railway spine or traumatic neurosis. Here we must suppose shock, fright, general disturbance of health and, perhaps, a predisposition to disease, to be the chief factors in its production. Mental disease following trauma may assume many forms. The most common picture, perhaps, is irritability, craving for alcohol and dementia. Not rarely it appears as epileptic insanity.

SYPHILIS.

Syphilis is becoming one of the great scourges of civilization. How great is its influence in the production of organic nervous disease was only recently recognized, when it was observed to be an important etiological factor in the production of locomotor ataxia and paresis. In cases of the latter disease a prior history of syphilis has been found in as many as 75% by some observers. Possibly we should consider syphilis as rather a predisposing than exciting cause. At least we do not find characteristic syphilitic lesions in paresis, nor is it benefited by anti-syphilitic treatment. Paresis and pseudo-paresis—a form of cerebral syphilis which very much resembles paresis—are the most common forms of insanity due to syphilis. In the early periods of syphilitic infection mania, melancholia, etc., sometimes occur, but their relation to syphilis is not altogether clear. The ordinary forms of brain syphilis, gumma, etc., may present mental symptoms, but these cases are scarcely to be classed with insanity.

INFECTIOUS DISEASES.

The acute infectious diseases are not rare causes of insanity. Chief among these are the acute exanthemata, influenza and typhoid. I shall merely refer to the mental disease following typhoid, for the latter is more frequently attended by mental disorder than the other infections, and, at the same time, the mental trouble is of greater severity and of less favorable prognosis.

The occurrence of mental symptoms in typhoid is very common. For the larger part we have only febrile delirium, but in quite a number of cases, perhaps from 6 to 8%, mental disease continues for a long period, and one-half of these remain permanently insane. According to some observers one per cent. of the inmates of insane asylums owe their mental disease to typhoid. The immediate cause of the mental disease is more difficult to determine. In most instances it appears during the height of the fever, less frequently it begins after the fever has subsided, and in rare instances it sets in before the fever. Elevated temperature, the typhoid germ, or toxins disturbances in the cerebral circulation, oedema of the brain, degeneration of nervous tissue, may all play a part in the producing of mental symptoms. Heredity, or other predisposition, often favors the mental outbreak.

It would tax your patience too much to describe thus fully still other causes of insanity. I shall, therefore, do little more than mention them.

OTHER DISEASES.

Other diseases than those mentioned cause insanity more or less frequently through febrile disturbances, anæmia, impaired nutrition, pain and suffering, as well as by their being the source of worry, anxiety, fear and the like.

In rheumatism and gout changes have been found in the meninges and cerebral vessels, accounting in part for the mental disorder occasionally attending these diseases. In some instances mental and rheumatic symptoms have interchanged with each other. Insolation may be followed by insanity, usually of transient character. Tuberculosis, heart disease, Bright's disease, cause insanity in a comparatively small number of cases. That attending Bright's is usually due to uræmia. Various functional and organic nervous diseases, neuralgia, chorea, locomotor ataxia, brain diseases, may be attended by insanity. Epilepsy very often produces mental disorder. Periodical attacks of insanity, frequent changes in character, irritability or more profound disturbances, and finally dementia belong to the

common history of this disease. Exophthalmic goitre is, also, very frequently complicated by mental disease. Myxoedema, in which the mental manifestations are a prominent part of the disease, is, fortunately, losing its sinister aspect under the new treatment with the thyroid. Diseases of the digestive organs are not unimportant factors in the production of mental disease, through impaired nutrition, disturbed circulation, and, possibly, the presence of toxic agents. The public attribute to disease of the sexual organs more influence in this direction than is their due. They probably play but a subordinate rôle in the production of insanity.

TOXIC AGENTS.

It remains but to mention some toxic agents or drugs. First comes alcohol, the most fruitful source of mental disease. Though the cases are countless where this cause is manifest, it must not be forgotten that there are instances where the origin of the trouble is unknown. I have seen quite a number of cases of insanity in secret drinkers, in which the cause long eluded detection. The symptoms manifested, may be quite varied. The other important agents of this character are opium, cocaine, chloral, ergot, the bromides, mercury, etc.

EXCESSES.

Excesses in venery, onanie, abnormal sexual excitement, etc., probably produce disease through the exhaustion induced. They are, to a greater extent, predisposing, than exciting, causes. Often they are a manifestation of disease instead of a cause. In those who have already a predisposition to disease such excesses may become exciting causes.

In the examination of a patient if we inquire carefully into his manner of life and all else we will generally find that not a single cause, but a number, have conspired together to bring on the mental disease.

OCULAR NEURALGIA.—

R Quininae hydrochlor., 0.10.

Morph. muriat., 0.05.

Aq. destill., 10.

M. Sig. Instill five to ten drops into the eye.—*Markoff, Med. Rec.*

THE USE OF CASEIC ACID IN THE TREATMENT OF TUBERCLE.

BY J. L. C. WHITCOMB, M. D.,
LIBERTY, N. Y.

IT HAS been the habit of the writer for a number of years to divide mankind, for clinical purposes, into two grand pathological divisions.

On the one hand we have what may roughly be termed the *acid division*, the chief characteristic of which is hyper-acidæmia.

In this class we will find rheumatism, chorea, gout, lithæmia, uric-acidæmia, asthma, eczema, migraine, emphysema, chronic bronchitis and cancer; with the secondary diseases arising and resulting from these, such as cardiac and circulatory lesions, renal, hepatic and cerebral morbid conditions and secondary anæmias.

The reaction of the blood is always alkaline, but its alkalinity varies greatly in different individuals, also in the same person at different periods of the day, being influenced largely by diet. While there is a certain range for variations which is physiological, when these limits have been passed either one way or the other there results a pathological state of the system which manifests itself in a multitude of ways. Heredity, predisposition, environment, habits of life, etc., are usually the factors which determine the character of the morbid process; and the organ or organs most vulnerable being the theater of action for the disease which results.

In this classification it is assumed that in persons belonging to the acid group there is an inherent and constant tendency for the acid constituents of the blood to exceed their normal limitations.

In contradistinction to the acid division and diametrically opposed to it in all of its essential features, we have what for the want of a better name, may be called the *alkaline division*.

In this class, hypo-acidæmia is the distinctive element and characteristic, and is represented prominently by tubercle and in a lesser degree by struma, scurvy, diabetes, primary degenerations and anæmias, also

by certain diseases of the nervous system of central origin.

The diseases resulting from either of these morbid diasthetic conditions are diseases of malnutrition, modified perhaps by environment, e. g. germ life, climate, etc., also by heredity.

In the acid group there is, in my opinion, an excess of potential bionergy; in the alkaline, a deficiency. In the former there is an exuberant cell vitality disarranging vital chemistry by its unbalanced manifestations.

In the latter, bio-chemical processes are imperfectly performed because of deficient potential and circulating energy of the physical basis of life. One is marked by positive qualities, the other by negative. The one speaks of life abundant, threatening its own existence with the waste products of its own perverted activities. The other tells of primary degeneration and decay. These opposite tendencies of cell life are sometimes graphically seen in ulcers.

For instance, in the exuberant ulcer we see the conservative ends of Nature defeated by the impetuous and misdirected efforts of her physical agents—the cells—to fill the breach. In the indolent ulcer, on the other hand, we find the cells scarcely competent to maintain their own individual existence, and wholly incapable of exercising the higher function of reproduction essential to repair.

This classification of man according to disease tendencies, was first suggested to the writer by the extreme rarity with which tuberculosis or any of its manifestations is found associated with the diseases usually ascribed to the presence of an abnormal amount of uric acid in the system. The line of cleavage between these two groups of diseases, at first vague and illy defined, with continued observation became sharper and more accentuated, until at present I rarely examine a tubercular patient without ascertaining if he or his family be subject to rheumatism or any of its allied conditions. Information thus obtained has an important bearing on the prognosis of the case. One individual's experience does not warrant broad generaliza-

tions or form a sufficient basis for dogmatic conclusions. Yet, I have become convinced from my own experience and observation that if a person of hyper-acid temperament becomes tuberculous, his chances of recovery are far superior to his who belongs to the hypo-acid class.

This classification is real and not arbitrary, as any one may determine by a little observation.

I believe that every person can be assigned to one or the other of these two general classes.

Obviously the whole importance of this classification derives its significance from the relative immunity which a member of one group enjoys to all of the diseases and morbid conditions belonging to the other, and the therapeutical indications which such relations might suggest.

While this immunity is far from being absolute, it still affords us a broad margin of probability on which to base therapeutic deductions.

Physiology teaches that the salivary secretion is alkaline, that the gastric is acid, that the secretion of the small intestine is alkaline, and finally that the secretion of the large bowel is acid. The chemical reaction of these various secretions of the alimentary tract evidently bears an important relation to the chemical processes of primary digestion. And any change in the normal reaction of these secretions interferes markedly with the proper performance of their function and indicates disease. If proper chemical reaction be so essential to the coarser processes of primary digestion, how much more important must be the quantitative reaction of the circulating fluids of the organism to the bio-chemic process of secondary digestion or assimilation.

The circulating fluids of the body are the *pabulum vitæ* of the cell. Its atmosphere in which it lives and moves and functionates, and the proper chemical reaction of this atmosphere is as necessary to healthy cell life as is the normal nutritive constituents of this fluid to such life.

Tubercle bacilli can not be cultivated in an acid culture medium. We have premised that hyper-acidæmia is also highly inimical to the growth of tubercle in man.

Assuming that there is antagonism between hyper-acidæmia and tuberculosis, it is immaterial from a clinical point of view whether this antagonism be essential or incidental, that is, whether the hyper-acidity of the blood is directly inimical to the growth of tubercle, or whether it is that the state of cell bionergy responsible for the acid condition of the blood, is also a state giving or possessing relative immunity to tuberculosis.

It is certainly somewhat suggestive that not only will a nitrogenous diet produce hyper-acidæmia and is largely responsible for the uric acid diseases owing to its sub-oxidation, but, moreover, just in proportion as a patient can take nitrogenous food can he raise the resisting power of his organism to the encroachments of tubercle.

Just here arises a question of vital importance to the relevancy of this paper to the object sought by the writer, namely, to discover the secret of nature's method of producing immunity to tubercle. The question is this: Is this increased resisting power which follows a nitrogenous diet due *solely* to greater cell vitality, or is the parasite rendered *hors de combat* by the hyper-acid medium in which it has to operate?

It is certainly fair to assume that both of these factors play a part in bringing about the results obtained. In reaching this conclusion it is immaterial whether we consider tubercle a germ disease or one of hypotrophy.

It might be contended that in hypotrophic diseases of non-tubercular character, nitrogenous food is the tissue builder and restorative equally as well as in tubercle. While this cannot be denied, it must be borne in mind that in tubercle the condition is more complex. Here we have hypotrophy, plus a modifying and complicating germ.

Also it must not be forgotten that hyper-acidæmia does not render a person immune to hypotrophy, but it does give relative immunity to the germ.

Therefore it is logical to affirm that nitrogenous foods restore the wasted tissues in tuberculosis, as it does in all wasting diseases; but in addition

to this, in tubercle it reduces the alkalinity of the blood to a point where the bacilli do not flourish.

There is but little doubt that if we could produce an artificial uric acid diathesis we should be able to confer immunity to tubercle.

It would seem that this imperfectly understood condition depends on hereditary bias, and it is doubtful if it can ever be acquired with anything like its hereditary force. The ultimate factors which determine the primoidal propensity and stamp the character and settle the fate of future generations, are matters of speculation.

It may be that this transmitted diathesis is one of the stages or phases of man's evolution. Whether in the past he was carnivorous, and therefore exempt from tubercle, or whether in the future he is to attain that fortunate state, are interesting problems for the student of biology.

If it be true, as is claimed by some writers, that genius and marked mental and nervous development are stigmata of degeneration, and as these are attributes in a large measure of the hypo-acidæmic class of mankind. It may be that in tuberculosis, so universally prevalent and so generally fatal, we see but the working of that pitiless law of the weakest going to the wall and the survival of the fittest. The world has never been without some universal scourge to sweep away the unfit and leave a stronger, better race of men who were immune to many of the plagues that afflicted their ancestors:

If the future man is to be carnivorous and comparatively exempt from tubercle, it would be interesting to know if tubercle was more prevalent in vegetarians of to-day than in others. It is claimed that diabetes is, and most diabetics die of phthisis. In the animal kingdom tubercle is rare in carnivora and common in herbivora, especially the cow.

Here, also, in the carnivorous animal we find immunity to tubercle associated with hyper-acidæmia.

Most of terrestrial energy is derived from solar rays fixed and stored in vegetation, and still further concentrated and potentialized in animal tissue.

Therefore the carnivorous animal receives the maximum amount of energy under high tension, requiring the minimum amount of loss in rendering it kinetic. It is undoubtedly in this vast reserve storage of latent energy, and the acid elements always associated with it, that we must seek the true source of the carnivorous immunity to tubercle. When we consider the advanced state of bioplasmic differentiation in man, and the instability of protoplasm in general, and of highly organized tissue in particular, it is not surprising that we see individuals of the hyper-acid class becoming victims of the hypo-acid diseases more frequently than we witness the opposite transition. That is, it is easier to fall than to rise, to disintegrate than to build up. Just as it is comparatively easy to render an acid urine alkaline, but quite difficult to make an alkaline urine acid, so it is far easier to produce hypo-acidæmia than to produce hyper-acidæmia.

In considering the practical side of this subject, it is well to remember that all organic life is relative and differs only in degree. Also that tubercle bacilli are absolutely innocuous to the normal organism, and that bioplasm must be devitalized to a certain degree before the bacilli become a pathological factor. So true is this last proposition that we almost invariably look for tubercle to develop in every person whose vitality has been reduced below a certain point. And we are seldom disappointed in this expectation, as is abundantly evidenced by the fact that nearly one-half of the adult population is tubercular.

Tubercle, in fact, has become almost synonymous with hypotrophy. There is one significant exception to this general law, namely: That other class—the other half of mankind, perhaps—that we have designated as the hyper-acidæmic class. Individuals of this temperament may be reduced to conditions of extremely low vitality, still never develop tubercle, and if they should become tubercular the prognosis is highly favorable to a cure.

Considering life as a process of combustion, there appears in this class, a tendency to impure combus-

tion from insufficient draught, as it were. One of the bi-products of this sub-oxidation, being some acid property of the blood which confers immunity to tubercle.

Tubercle is like the fern-brake or lichen, it is indigenous to poor soil, and is always found there and *nowhere else*.

As nature abhors a vacuum, no less does she abhor a waste of force in her economy. And nowhere else is this frugality more beautifully seen than in the transformation and conservation of energy incidental to the decomposition of protoplasm.

Energy liberated during the several stages of this process is capable of supporting myriad swarms of lesser types of life.

These forms of life are invariably present whenever decomposition of organic matter occurs, or is even threatened. If we conceive of life as one form of motion, like heat or light, then it is eternal, and when the material and conditions which support it in one mass of protoplasm is exhausted, it simply passes to another. These are the conditions which obtain in tubercle. Here we have tissue exhausted to a degree that threatens disintegration, and the ever-present germ ready to appropriate to its own ends that which can no longer serve a higher purpose.

Tubercle *per se* is a surgical disease and is being cut out of the body more and more every year whenever the knife can safely reach it.

After pulmonary tubercle has reached the stage of coagulation necrosis, it is no longer a question solely of hypotrophy, complicated by an invasion of germs, but a new factor is now introduced to be met and overcome by treatment. A foreign body, in fact, dead, irritating and necrotic.

To expect to find some specific sovereign remedy to cure this complex malady, would seem a dream most fantastic; akin to those wild dreams of converting silver into gold or seeking a fountain of perpetual youth. Following Koch, and under the hypnotic spell of his great name, many unbalanced enthusiasts are still pursuing his Quixotic efforts in search of a specific.

The various serums which follow one another so rapidly that one can hardly keep track of them are all remarkable in one particular; that is, one appears to be just as efficacious as another.

The evil they do is never known. The good they accomplish lasts only during the period of suggestion, or, until another serum is *discovered*. Still the use of these unknown substances is called "scientific treatment." O science, what deeds are done in thy name!

The impression is gaining ground that the serum delusion has about had its day and that we shall soon awaken to the fact that we have been traveling in the same old circle that nearly every generation has trod in seeking a specific. Medical history repeats itself.

It would appear quite as rational to expect to remove a bullet from the lung by some specific drug as to remove tubercle and heal the cavity which retained it. Even admitting Koch's dictum regarding the cause of tubercle, none will deny that all treatments based on this dictum are a failure; absolute and humiliating.

Nature has a way of curing many of these cases, and if we can find no short and royal way to success, we might study her methods with profit and seek to imitate them. While the lithæmic is born and not made, I became convinced some time ago that a condition analogous to lithæmia could be artificially produced and maintained in the majority of persons by the administration of organic acids, together with as much nitrogenous food as could be assimilated.

With a view of putting this theory into practice, I began about two years ago to give caseic acid to my phthisis patients hoping thereby to favorably modify the tubercular process. The results thus far obtained by this treatment have not only justified its continuance but have far exceeded my most sanguine hopes. Its action appears to be manifold.

First.—It stimulates and assists the normal digestive processes of the stomach which in phthisis are usually sluggish.

The usual craving of this class of patients for salads or anything acid

would suggest an appeal of Nature for aid.

Second.—It produces hyper-acidæmia and in this way acts as a parenchymatous stimulant, causing an increase of activity of the cells in all of their several functions.

What the warm summer shower is to vegetation after prolonged drought, this acid seems to be to the cells. Bio-chemic processes that have long been in abeyance resume their usual activity.

Assimilation and cellular function again take up their work which had almost come to a standstill. If, however, this acid be given beyond a certain point, which will vary in different persons, and in the same individual at different times, it becomes an irritant to the peripheral nerve endings and gives rise to neuralgias, myalgias, arthralgias, precordial anxiety, a tense pulse and mental hebetude with a tendency to sleep.

The hyper-acidæmia produced also promotes reaction of the organism to the tubercle, producing fibrosis which is absolutely essential to a cure.

We might therefore call this acid an internal cicatrizant. The sub-acid state of the blood in phthisis favors the development of tubercle as the bacilli require an alkaline soil on which to propagate. Therefore by reducing the alkalinity of the blood by giving acids we render the soil less congenial to the germs, at the same time stimulating the tissues to greater resistance and increasing phagocytosis.

Caseic acid has long been used in tubercular ulcerations and infiltrations of mucous surfaces in the throat, larynx and alimentary tract.

In these locations it has been used topically with the most excellent results, but its action here has been thought to be local, owing to its mildly caustic, astringent and stimulating properties; but we shall have to give it credit for other qualities also.

In tubercular enteritis, and in diarrhoea occurring in phthisis, not distinctly tuberculous. I know of no other drug that gives such uniformly good results. I have given this remedy in over two hundred cases of phthisis in various stages of develop-

ment and have rarely failed to see improvement follow its use.

Frequently an improvement of the symptoms will begin within twenty-four to forty-eight hours. I usually give from one to four drachms a day, in water or capsules. It may be given in milk with which it forms a mixture which tastes and looks not unlike kumyss.

In sweetened water it makes an agreeable acidulated drink like lemonade. As a most important accessory to this drug I prescribe six to ten raw or rare eggs a day with as much raw or rare beef as the patient can take, besides milk, cream and butter. Also bone marrow.

This last nutrient I consider one of the best foods that can be given in phthisis. I am careful to impress upon the patient that the above mentioned foods are a very important part of the treatment, and that they must work out their own salvation, not with fear and trembling, but with a sublime faith in their ability to get well.

A constant out-of-door life with physical culture and graduated hill climbing, etc., is also enjoined. The functions of the excretory organs are closely watched, especially the skin is kept active and tough by daily cold rubs which prevent colds and internal congestion.

In incipient cases the effects that can be directly attributed to the acid, are not so clearly defined or apparent, as in more advanced cases. But this is owing to the fact that in this region, climate, diet and hygiene effect these early cases so promptly and favorably, that it is difficult to assign to any drug that may be exhibited, its proper rôle in the good results which accrue.

There is always, however, a small percentage of these cases which after a reasonable sojourn here, do not manifest the usual signs of improvement.

It is in these cases that the beneficent effects of the acid are seen in a marked degree.

It seems to be the one reagent necessary to revive the whole bio-chemic processes which we call life. The appetite is at once regained and then follows an amelioration of all

the symptoms as would be expected from an increase of food.

It might be well to state at this point that the writer has regarded the acid treatment as simply a part of the dietetics of phthisis. It simply supplements the nitrogenous foods in maintaining the normal acid elements of the blood necessary to prevent the development and spread of tubercle. It also aids these foods in building up tissue and fortifying them against retrograde tendencies.

What the organic salts of fresh fruit are in scurvy, organic acid, especially caseic acid, is in tubercle.

It is in the more advanced stages of phthisis, where extensive consolidation, softening or excavation is progressing that we obtain the greatest assistance from the acid treatment. It is at these stages where occurs the battle royal between the cellular constituents of the organism and the invading swarms of the paracite.

It is now that the surgical aspect of the disease appears and ragged abscess cavities with necrotic tissues and septic poisoning combine their deadly influences to aid the enemy in overwhelming the host.

The vicious circle, once established, the tissue cells are attacked, not only in front, but on the flanks and in the rear and no wonder they so often succumb to a paracite that is fighting on its own soil, so to speak, namely: A sub-acid state of the blood. Nature has always had to deal with this condition in her own inimitable way, using her own defensive weapons unaided by the art of medicine.

In this dire strait, that has always defied human succor, all man has been able to do thus far has been to supply the material and favor the conditions, such as food, climate, etc., to enable her to work to the best advantage. It is only in this humble capacity that the acid treatment can be suggested. It will aid Nature by promoting the normal acid condition of the blood which, as we have attempted to show, is Nature's defensive armor against tubercle.

It will also aid by cutting off the morbid process and limiting the farther extension of the disease by the fibrosis which it induces. This latter effect of the acid is doubtless of greater value in the advanced stages

of the disease, as in these stages, the bacilli cut but an insignificant figure among the factors to be considered in treatment.

Caseic acid causes fever to diminish and night sweats to disappear. A marked decrease in the amount expectorated will usually be the first result which the patient will notice. This is often reduced one-half within forty-eight hours.

In cases of bronchorrhoea this is a great relief to the patient whose strength is being rapidly reduced by the exhausting drain on the system and the incessant effort required to raise.

A peculiarity of the sputum under this treatment, often remarked by the patient, is a peculiar "cool taste," a "different taste," unlike the sweetish, sickish taste of pus or muco-pus, but a sensation such as is produced by effervescing fluids.

Cavities appear to clean up and shrink and cicatrize much more rapidly. A falling in of the chest wall over a large cavity seems to occur much sooner, as I have often been surprised to note. The effect on lung tissue that is consolidating can best be described by citing the following case:

M. A., æt. 40, American, weight 160, book-keeper, resides in N. Y., blonde, good physique, was taken with hemorrhage early in May, 1898. He came to Liberty a few days after and was examined by myself about a week after his hemorrhage. I found lungs normal except at a point under superior internal angle of right scapula, where high pitched, prolonged expiration indicated the seat and extent of his trouble. At this time he had no fever or sweats and but a slight dry cough. I put him on bone marrow, eggs and rare meat, milk, cream and butter and ordered an out-of-door life. The latter end of August he returned home and to business, apparently a well man, having gained twelve pounds.

Within three weeks, however, he returned to Liberty, having suffered another severe hemorrhage.

He also had a third hemorrhage after his return to Liberty. Examination now disclosed an area of consolidation the size of a silver dollar, at the point of his old trouble. Most

râles and tubercular breathing were marked. Fever, 103.5°, pulse 120, night sweats with loss of appetite. I now ordered caseic acid, ten drops every hour and sulphate of magnesia to produce two or three watery passages a day, forced nitrogenous food with bone marrow. Within five days his fever was normal and cough, expectoration and night sweats nearly gone. Examination now only showed slight tubular expiration. In this case a process of lobular pneumonia was resolved before the involved portion could become infiltrated with tubercle. It usually requires several weeks for such a process to become quiescent and then only after the involved lobule has become so tubercular that it is damaged beyond repair.

Several such cases as the one just cited have convinced me that the acid has a decided effect in the result obtained. In those severe cases of tubercular pneumonia, where the whole of a lower lobe is involved and is followed rapidly by acute softening and sloughing of the whole lobe, leaving an immense cavity to be healed. I have seen several cases of this description practically cured by the prolonged use of this acid. If this drug was of no other use than in hemorrhagic phthisis it would still be of infinite value for in these cases it seems to act almost as a specific.

I have used this agent side by side with creasote with the result that I have almost discarded the latter drug in my practice. I have also given ichthyol a somewhat extended trial, using it in eighteen cases in order to compare results with those obtained with caseic acid.

So far as I am able to judge from an analysis of these eighteen cases, I obtained about the same results as I used to get from sulphur, of which ichthyol is so largely composed. Both drugs tend to produce hemorrhage, in my opinion, and ichthyol is apt to irritate stomach and bowels. When sufficient time has elapsed to make such a report of some value, I shall make a full report of the cases I have treated with caseic acid.

PHTHISIS.—Inhalations of formaldehyde mixed with carb.-acid gas.—*Ex.*

SOME PRACTICAL REMARKS ON THE OBSTETRIC FORCEPS; A DESCRIPTION OF A MODIFIED SIMPSON FORCEPS AND ALSO A TRACTION INSTRUMENT.—D. Benjamin (*Am. Gyn. and Obst. Jour.*, Sept., 1898) called attention in an address delivered before the Philadelphia Obstetrical Society to the respective merits and demerits of various forceps. He finds that the long forceps are far more serviceable on all occasions than the short. Of the curved forceps, he claims, Simpson's are the only ones of real value, as they do not slip and are not likely to injure either mother or child. But the only disadvantage they possess is in the handle, which is much inferior to that in Hodge's forceps. The author, therefore, has modified Simpson's forceps by substituting Hodge's handles. This, the author claims, makes the instrument perfect. He also devised an instrument which gives axis-traction at any time during delivery. It can easily be applied and removed without removing the forceps.—*Ex.*

OVARIAN CYSTS AND TYPHOID FEVER. Lovrich exhibited at the recent meeting of the Royal Hungarian Medical Association a suppurating ovarian tumor. The patient was 24 and had borne two children. Four months before the operation she suffered from an attack of typhoid fever. During convalescence pain in the hypogastrium set in and abdominal swelling was observed. Accordingly Lovrich operated, removing a cyst of the left ovary. It was full of pus; on cultivation typhoid bacilli were obtained. Widal's reaction was, however, absent, which showed, in Lovrich's opinion, that the supuration was due to infection from the bacterium coli; that germ reached the ovary through several adherent coils of intestine. The patient made a good recovery.—*Centralbl. f. Gynak.*

DIARRHEA OF CHLOROSIS.—

R Zincohemol, gr. 80.

Pulvis aromat., 3 2.

Div. in chart. No. 10. Sig. One powder three times a day.—*Limousin, The Med. Stand.*

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William C. Wile, A. M., M. D., LL. D.,
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John J. Berry, M. D.,
Assistant Editor.

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Editorials.

ERRORS IN THE TREATMENT OF PHTHISIS.

THE ADVENT of the New England winter suggests various problems which the general practitioner is called upon to solve, but which he often fails to dispose of satisfactorily either as regards himself or his patient. This subject has recently received attention at the hands of Knight, in a paper read before the American Climatological Association, in which he refers to the five chief errors commonly made by the medical man in the management of such cases. These are:

1. A failure to make an early diagnosis. The existence of a morning cough and a slight elevation of temperature being ignored by both doctor and patient, so that considerable time often elapses before a microscopical examination of the sputum or a physical exploration of the chest is insisted upon.

2. Failure to admit the gravity of the situation the moment it is discovered, and until the prospect of cure is doubtful or hopeless.

3. The recommending of drugs which are positively harmful. Among these may be mentioned cough-syrups, cod liver oil, creasote in large doses and unlimited amounts of whiskey. These in many cases disorder the stomach and impair the appetite and general condition, without having the slightest beneficial effect upon the disease.

4. A serious error is the sending away to distant points of patients in the late stages of the disease. In this way the comforts of home are exchanged for poor accommodations and improper food, combined with the disadvantages of travel. In the case of those in poor circumstances there is an outlay of money which at home would have provided them with comforts and luxuries and would undoubtedly have prolonged life.

5. A very grave error is allowing patients to travel without proper medical supervision. Not only are new pathological conditions constantly presenting, but the invalid is seldom competent to carry out a course of treatment in new surroundings and is also liable to fall into the hands of incompetent and unsuitable practitioners.

The dangers thus indicated are timely as well as real and the profession would do well to consider them carefully and act upon them without hesitation.

HOSPITAL FOR CONSUMPTIVES.

APPROPOS of matters tubercular, we note with pleasure the establishment of such a hospital at Rutland, Mass., which is really a branch of the Mass. General Hospital and is under state control. The result is, that for a nominal sum, any tubercular patient recommended by the committee on admissions may secure the many advantages which such a sanatorium affords, and this at a very trifling cost. The location of the above is excellent—its construction is after the latest and most approved plans and with its capacity of about 200 patients should be able to carry on a great and successful work and also secure data of much value to the medical profession. To those who are unable to secure the advantages of western or southern climates this will certainly prove a great blessing, as many of the ob-

jections noted elsewhere are successfully met by an institution of this sort which is near at hand and under proper medical supervision.

As the first sanatorium of its kind under state control in this country, its future will be a subject of general interest.

THE DISADVANTAGE OF STERILIZED MILK.

WHILE a year or two ago no one ventured to question the superiority of sterilized milk, we have noted recently a falling off of enthusiasm regarding this preparation; in fact its use in some quarters has been almost entirely discontinued.

Carstens, of Leipsic, in a paper read at the Düsseldorf Congress, discusses this subject at length and gives a very satisfactory *résumé* of the advantages and objections connected with the use of sterilized milk. The chief conclusion reached by him is that the continuous and exclusive use of this product by infants leads in a large number of cases, to impairment of nutrition, as evidenced by the existence of anemia, rhachitis, scurvy, etc. In addition to the physical and chemical changes produced by sterilization, the necessary uniformity of the food is shown to be an injurious factor.

Of course there are many conditions which render sterilization a measure of necessity, but on the other hand, it has been found that fresh, clean, slightly cooked milk gives equally good results and is, besides, the nearest substitute for mother's milk.

—:O:—

INOPERABLE UTERINE CANCER.—Bernhart (*Centralblatt für Gynäkologie*) recommends the injection once in four days of thirty minims of the following solution:

R Salicylic acid, parts 6.

Alcohol at 90°, parts 1,000.

M. There is at first some exacerbation, then disappearance of the pains and retraction of the tumor.—*N. Y. Med. Jour.*

After Office Hours.

II.

“I NEVER could understand,” remarked Dr. Budweiser, carefully inserting a soft rubber catheter as a book-mark, between the leaves of “The Day’s Work,” and placing the latter on his desk, “why authors continue to write such rot regarding doctors and medical subjects. You would expect in these days of realism to get something which was true to nature, but, strange to say, we seldom do.

Whatever the general public may think of it, such things are very amusing to us, for physicians well know that the routine doctor of fiction is either a society idol who habitually wears a dress suit, or else a Dr. Jekyll, with a miscellaneous assortment of vices which the proprietor of an opium joint would hesitate to acknowledge. He is always doing something which is villainous or impossible and he is so disguised by the qualities given him by the author, that an expert would be unable to tell, without a microscopical examination, whether he was an osteopath or a confidence man. And the medical science of our current literature! Was ever anything so painfully funny? What beautiful half-tone pictures of diseases, and how simple are the facts of pathology and physiology after reading the harassing details of a medical case! The heroine, having decided in the last chapter to commit suicide and get into the newspapers, drinks a bottle of laudanum. She then immediately clutches several times at the atmosphere, and crying out either ‘I am avenged!’ or ‘Villain, behold your work!’ as the details of her previous life would naturally decide, she falls to the floor a lifeless corpse. Of course we all know that for creating lifeless corpses at a moment’s notice, there is nothing quite so good as opium.

Now, 'here is something good in the line of up-to-date surgery," said the doctor, indicating an article of Conan Doyle's in a recent number of the *Cosmopolitan*; "Did you read it? No? Well, the wife of a mechanic becomes infatuated with a beautiful tenor voice, whereupon the aggrieved husband, after a little surgical coaching, provides himself with a mouth gag, a bottle of chloroform and a pair of queerly-shaped scissors. Then sallying gaily forth to the *rendevous*, he overpowers his rival, administers the anæsthetic and dexterously divides the vocal cords in such a way that the victim is ever after incapable of singing a note. Now isn't this awful rubbish to inflict upon a credulous public? And Conan Doyle above all others! But perhaps it was written for the commuters from Hoboken, who have to run for the eight o'clock ferry boat. It certainly couldn't have been designed for the critical or intelligent reader.

Of course there is no objection to authors borrowing a few of our drugs or diseases for stage purposes, but I do hate to see them used in such a careless and indifferent way. The profession has its rights and when we see a case of heart disease produced by an emmenagogue, or one of delirium tremens exhibited as an instance of nervous prostration, we feel called upon to rise up and enter a protest against the unscientific taking off of these invalids. But these remarks were not called forth by anything that Kipling has done, for we all know that he never attempts anything without due preparation. I have just been reading in this work the first article entitled "The Bridge Builders," which, by the way, is one of the best short stories he ever wrote. How graphically he describes the chief features of the drama—the growth of the great structure under the restless activity of the host of busy laborers—the coming of the torrent and the havoc and desola-

tion which was left in its path; all of which seems but the result of some mysterious and irresistible force which hurries along the act to its final completion. But more realistic than all is the opium delirium of the engineer, which is told with absolute fidelity to nature, and illustrates the effects which may follow the exhibition of the drug under certain conditions of mind and body. This part is weird and uncanny, and reminds one somewhat of De Quincey's "Dream Fugue," or his "Vision of Sudden Death," while the flavor of Eastern mysticism serves, in the case of the initiated, to intensify the effect. Hence, as a piece of vigorous English, it should rank very high, and moreover the medical portion cannot be considered faulty or overdrawn. But *apropos* of medical fiction, I musn't forget to compliment Stephen Crane on the way which he holds the mirror up to Nature. Admitting that he is young and that some of his work is crude, you would nevertheless enjoy reading his recent war story "The Warp of Thin, Red Threads," in which the description of the medical aspects of the Santiago campaign is by no means bad. In view of the fact that Crane has never perpetrated any of the above mentioned offences upon the profession, I am willing to predict for him still greater successes in the field of literature, but on the other hand, the author who entertains the public by trotting us into the ring and making us perform all sorts of queer antics is ill-adapted for this earth and should be at once operated upon by some surgeon who is getting together material for an 'abdominal' paper, or who advertises that he has never lost a case," and the doctor with a stealthy movement pushed a magazine over two or three death certificates which lay on the table, but in doing so inadvertently tipped over a bottle containing a healthy appendix preserved in alcohol and *also* in

the memories of several of his colleagues.

In search of some expedient to cover his embarrassment, my eye fortunately rested upon the stein which he had just asked me to replenish for the third time, and which bore an inscription of considerable length. So, to bridge over the gap, I asked him for a translation of its gothic characters. Now the doctor thought I was going to ask where he got that appendix, and marked was the expression of relief when he found that the conversation was diverted into other channels.

"Oh! that is one of the wise precepts of one of the student corps. It reads 'Es ist besser mit Affen, mit Kater und Bären, Als allzeit mit Ochsen und Eseln Verkehren,' and a free translation of these words of double meaning would be that it is better to associate with the gay and the profligate than to spend all one's time with the slow and stupid. The *bête noir* of the German student, as you probably know, is the man who grinds continually and has none of the vices or convivial spirit of his fellows. He is first regarded with curiosity and is then wholly ignored. Hence the sentiment placed on this mug and which I have often heard quoted in the *Quartier Latin* of a university town. Most of these useful articles bear some kind of an inscription urging their owners to drown their cares in the flowing bowl, but I selected this one many years ago after a long search, because the wording was sufficiently chaste to bear the inspection of my future family. In fact, this and a small *schläger* cut over the right parietal bone are about all of the material evidence which I now possess of my sojourn in the dominions of the Kaiser."

"Speaking of study abroad," I remarked, "I suppose you advise all medical students to attend some of the German schools."

"I don't know about that," he replied, thoughtfully contemplating the allegorical picture on the stein, in which the joys of the true sinner were depicted in glowing colors; "to the elect—I mean the real student with a philosophical turn of mind, the German university offers more than any other institution in the world. Not simply because it is able to furnish more material, but on account of the mental training and the habits of life and thought which are there developed. One who has served such an apprenticeship is far better able to get hold of a subject and do justice to it than his co-workers elsewhere. Of how great a value this may be in the affairs of daily life is uncertain, but there certainly are departments in every country where such acquirements are indispensable. But the *bona fide* student of this kind is, in the eyes of the American, a somewhat remarkable being, for he cannot understand how so much learning and profundity can be associated with so much gaiety and even dissipation. Now if the right sort of man should ask me about going over to study, I should say, 'Go, young man, whether you can afford it or not! Go, if you have to pawn your watch to raise the needed money! Even if you come back penniless, as is quite probable, you will bring with you enough intellectual pabulum to last a lifetime, and also the ability to live frugally and get much enjoyment out of a little.' Now for the other side of it. Hundreds of those who go abroad haven't the slightest conception of their needs or their opportunities. In the first place, no American who is wholly ignorant of the language should go there at all. Under the very best conditions it will take eighteen months to acquire a fair working knowledge of German, and by that time he will probably be obliged to come home. Much of this time, consequently, is a dead loss. While

a mere sight-seer may pick up a good deal in clinical medicine and surgery which is valuable, the why and the wherefore must necessarily remain a mystery. It is like attending a German play, where he might follow the movements of the actors and enthuse over the stage settings, but where the subject matter and the *motif* are a sealed book."

"Then you don't think such men as these get even a fair knowledge of medical matters," I said.

"Very few get their money's worth. A large majority affiliate at once with their fellow Americans and form a sort of colony. They look up an instructor who speaks English and get some facts from him. Then they visit the clinics and see the professors and the operations they perform—simply going through the motion, but really acquiring little more than a superficial knowledge of surgery, and about as much medicine as you could put in a thimble. The only way to attain to the true inwardness of German thought is to literally live with the people. You can't absorb the many valuable features of their private and social life by reading a guide-book, or riding through the place on an electric car. Now my work brings me often in contact with these young men we are speaking of and I find that not one in fifty can speak the language three consecutive minutes without making a mistake, and that not one in a hundred can translate scientific prose so that it can be understood. They invariably turn out something, compared with which 'English as she is spoke' is a classical and dignified production. No, the so-called study abroad is generally a farce, and helps only to bring discredit upon foreign institutions and methods."

"I suppose you recall your early university life with much pleasure," I suggested.

"It is something that one can never forget, even though he attain the age

of the patriarchs," replied the Doctor. "There is nothing like it on earth, and the one who has lived in the inner circle carries with him through life many indelible impressions. In my day, and it wasn't very long ago either, we didn't have any book entitled 'How to do Europe for \$97.50,' or any inside information which enabled us to live in the lap of luxury for 17 cents a day, but we knew where to go and where to live, and that was much better. We didn't have much money in those days, but our newly made acquaintances were kind to us, and even the little flaxen —"

"I take it your life was a sort of Bohemian one," I interrupted.

"Yes, it was both Oriental and ascetic. The atmosphere was impregnated first with culture, and then with beer and tobacco smoke, and you usually got a good deal of both at about the same time, until you finally arrived at the conclusion that they were not only not incompatible, but that the latter were really true incentives to culture.

I well remember the hours of intense mental application which each day extended from the late afternoon well into the night, but following this there seemed to occur an almost simultaneous exodus from the several quarters of the town towards the various places of resort, and the late hour would find congregated there almost the entire wit and wisdom of the community. Many a time have we had at our little table well-known scientists and professors of law and medicine, and some of the most brilliant talks I ever heard were given off-hand by these men who had dropped in casually to share our pipes and beer. And the proprietor of the little hostelry! Why, he looked upon us all as his children. He knew all our trials and tribulations, and he paid more attention to them than did we ourselves. He was devoted to our

interests and he lent us money in times of need, which, by the way, came along pretty often. Yes, those were gay, yet busy days—conditions which were dangerous and perhaps fatal to those who had no balance-wheel and loved beer more than books, and material things rather than mental advancement. Yet, as I look back, I cannot recall a single one of my old associates who were in any way injured by this course of life. In fact, the requirements of university life placed something of a check upon riotous living, and no one but a confirmed idiot would neglect his routine work for outside diversions."

I confess that the last libation had made me a little drowsy and I hardly realized when the doctor stopped talking, but for a long time no word was spoken, as my friend seemed lost in reverie, and I hesitated to break the spell and call him back from the scenes of those student days to the dry realities of the present.

The fire in the grate burned low and from the glowing coals fancy conjured up strange forms and features. Shades of other days and shapes manifold—more alluring than those of the cloistered saint—more suggestive than those which the weird sisters showed to Macbeth. Night scenes in the wayside inn on the banks of the Neckar—dissolving views of the old Rath's keller and its congenial spirits, and fleeting pictures of festal days in the Hartz mountains. All these and more were seen in the ashes of the midnight fire, and from the hall of the Männerchor in a neighboring street, there came through the open window sounds of music and song, and, listening, one might hear almost forgotten words and then the faint echo of the refrain: "Will the old days come again?"

—:o:—

Abdominal section, with drainage, cures not a few cases of tubercular peritonitis.—*Keen, Ex.*

Book Notices.

THE MEDICAL NEWS POCKET FORMULARY for 1899—Containing sixteen hundred prescriptions representing the latest and most approved methods of administering remedial agents. By E. Quin Thornton, M. D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. In one wallet shaped volume, strongly bound in leather, with pocket and pencil. Price, \$1.50, *net*. Lea Brothers & Co., Publishers, Philadelphia and New York.

A more helpful book it would be difficult to devise. No man, except a specialist like the author, can be expected to keep posted on all the new remedies and to reject those which are valueless, together with those which are outworn, leaving a net residue representing the body of the best therapeutics at date. Dr. Thornton has done this, arranging the prescriptions under alphabetical headings of disease, so that the medical man, be he physician, surgeon or specialist, can instantly run his eye over the authoritative recommendations of the world's leaders in all the practical branches of medicine in the broadest sense of the word. The author has subjected each prescription to careful study and verification, and has appended useful annotations and indications as guidance in meeting the various stages and complications. Due attention has been paid to palatability and pharmaceutical elegance, points of increasing practical importance. The volume opens with a number of pages of useful data.

THIRTEENTH ANNUAL REPORT OF THE State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Transmitted to the Governor, December 1, 1897. William Stanley Ray, Printer of Pennsylvania, 1898.

Again these volumes, fruitfully laden with so much of interest to the profession—especially in point of view to the sanitarian—come to our table, and welcome they are. There is no question as to the position which the Pennsylvania State Board of Health occupies amongst the Boards of Health throughout

the United States. It stands in the very front rank for the best quality of work, and the Annual volumes are not only eagerly sought after, but carefully retained for the treasures they contain.

THE POCKET THERAPIST. A CONCISE Manual of Modern Treatment, for the Physician and Student (arranged alphabetically for ready reference). By Thomas Stretch Dowse, M. D. Wilbur B. Ketcham, 7 and 9 West 18th St., New York.

This little pocket volume will come in very handy to the busy practitioner. It is compact enough to slip in the inside pocket of the coat, and the information contained therein is of such a practical character that it is bound to be useful. The chapters are divided under—Treatment of Diseases—Poisons and their Antidotes—The Urine—The Blood—Sputum—Method of Staining Tubercle Bacilli—Vomit—Fæces—Therapeutic Serums (Antitoxins).

TWENTIETH CENTURY PRACTICE. AN International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In Twenty Volumes. Volume xvii, "Infectious Diseases and Malignant Neoplasms." New York. William Wood & Company. 1898.

Volume xvii of this series is now before us for review. Its title is "Infectious Diseases and Malignant Neoplasms." A careful scrutiny reveals the fact that this volume is projected on the same high plane of its predecessors, which, taken together, make this series of the twentieth century, on practical medicine, probably the greatest undertaking for a publishing house in the history of medicine, as well as an epoch maker in elaborate and up-to-date authority on the various forms of practice. When Zeimmsen introduced the great system known by his name twenty-five years ago and presented that magnificent series to the medical profession, it did seem as if no greater feat could be accomplished in medical literature, but the "twentieth century" is as much ahead of Zeimmsen, as is the telephone ahead of long distance transmission of speech of the same

period. The volume before us is, as we said, not only well written and up-to-date, but it contains much useful information upon these subjects which has never been presented before to the medical profession, and we cannot but commend it to our readers.

—:o:—

Current Literature.

"Intestinal Auto-intoxication," by Chas. D. Aaron, M. D.

"Injuries of the Eyelids and Eyeballs," by L. Webster Fox, A. M., M. D.

"Bicycle Hernia," by Geo. W. Miel, M. D. Reprinted from the *Colorado Medical Journal*.

"Diarrhoea and Bacteria," by Charles D. Aaron, M. D. Reprinted from the *New York Medical Journal*.

"Chronic Catarrh of the Stomach," by Charles D. Aaron, M. D. Reprinted from *The Pharmacologist*.

"Gastroptosis," by Chas. D. Aaron, M. D. Reprinted from the *Journal of the American Medical Association*.

"Diseases of the Ear as a Specialty," by Emil Amberg, M. D. Reprinted from *The Physician and Surgeon*.

"Are Complete Castrates Capable of Procreation?" by F. R. Sturges, M. D. Reprinted from *The Medical News*.

"The Palliative Treatment of Hernia," by Jacob Geiger, M. D. Reprinted from the *St. Joseph Medical Herald*.

"The Practical Application of Trusses," by C. H. Guibor, M. D. Reprinted from the *Kansas Medical Journal*.

"Cataract Operations; Mules's Operation Illustrated by Skiagraphs; Capsulotomy, Operation for Pterygium," by L. Webster Fox, A. M., M. D. Reprinted from *International Clinics*.

"State and Municipal Care of Consumptives," by S. A. Knopf, M. D. Reprinted from the *New York Medical Record*.

"The Treatment of Chronic Endometritis," by F. T. Meriwether, M. D. Reprinted from *The Charlotte Medical Journal*.

"Caries of the Teeth and Diseases of the Stomach," by Charles D. Aaron, M. D. Reprinted from *The Charlotte Medical Journal*.

"The Surgical Treatment of Appendicitis," by F. T. Meriwether, M. D. Reprinted from *The Charlotte Medical Journal*.

"Treatment of Diabetes Mellitus with Eulexine," by Edgar C. Skinner, M. D. Reprinted from the *Louisville Medical Monthly*.

"An Essay on the Reduction of Obesity," by William T. Cathell, A. M., M. D. Reprinted from *Maryland Medical Journal*.

"The Cure of Hernia," by Henry O. Marcy, A. M., M. D., LL. D. Reprinted from the *Boston Medical and Surgical Journal*.

"Hereditary Syphilis," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *Journal of the American Medical Association*.

"The Value of Surgery in Nervous Diseases," by Henry Waldo Coe, M. D. Reprinted from *Western Medical Review*.

"Transillumination of the Stomach with Demonstration on the Person," by Chas. D. Aaron, M. D. Reprinted from *The Medical Age*.

"The Surgical Treatment of Uterine Myomata," by Henry O. Marcy, A. M., M. D., LL. D. Reprinted from *The Journal of the American Medical Association*.

"The Aseptic Animal Suture; its Place in Surgery," by Henry O. Marcy, A. M., M. D., LL. D. Reprinted from *The Journal of the American Medical Association*.

"Some Observations of General Interest Regarding the Course and Management of Cataract," by J. H. Woodward, B. S., M. D.

"Iritis: Its Treatment. Strabismus: Mules's Operation," by L. Webster Fox, A. M., M. D. Reprinted from *The Medical Bulletin*.

"Mechanical and Surgical Treatment of Fractures of the Neck of the Femur," by Arthur J. Gillette, M. D. Reprinted from *Northwestern Lancet*.

"The Radical Cure of Inguinal Hernia by Fowler's Method, with Reports of Cases," by H. O. Walker, M. D. Reprinted from *The Leucocyte*.

"Dissertation 'On the Use of Formalin in Surgery,'" by G. P. Conn, M. D. Reprinted from *Transactions of the New Hampshire Medical Society*.

"A Successful Gastrectomy for Cancer of the Stomach," by Maurice Howe Richardson, M. D. Reprinted from the *Boston Medical and Surgical Journal*.

"Some Sources of Failure in Treating Lachrymal Obstructions," by Leartus Connor, A. M., M. D. Reprinted from the *Journal of the American Medical Association*.

"The Relation of Suppuration to Shortening of the Limbs in Tuberculous Disease of the Hip Joint," by Russell A. Hibbs, M. D. Reprinted from the *New York Medical Journal*.

"Further Observations Regarding the use of the Bone-Clamp in Ununited Fractures, Fractures with Malunion and Recent Fractures with a Tendency to Displacement," by Clayton Parkhill, M. D. Reprinted from *Annals of Surgery*.

"On the Treatment of Deficient Excretion from Kidneys not Organically Diseased, and some of the Diseases Peculiar to Women, and Diseases of the Skin," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *New York Medical Journal*.

"Have we Found a 'Radical' Cure for Inguinal Hernia?" by W. D. De Garmo, M. D. Reprinted from the *Charlotte Medical Journal*.

"The Early Diagnosis of Cancer of the Stomach," by Chas. D. Aaron, M. D. Reprinted from the *Journal of the American Medical Association*.

LATE LITERARY NEWS.—To have the men who have demonstrated their organizing ability by great business successes tell their secrets of organization, is the object of the editor of *The Cosmopolitan*. That he is succeeding is proved in the January issue by the article from Charles R. Flint, who is regarded in New York as one of the three or four ablest organizers in America. He is president of the Rubber Trust and the head of the great mercantile house of Flint, Eddy & Co., which has its ramifications in almost every port of the world. Mr. Flint tells very openly what makes for success in the organization of business. His article may be read with interest by the Rockefellers, the Armours and Wanamakers as well as by the humblest clerk seeking to fathom the secret of business success.

In the same line is an article, also in the January *Cosmopolitan*, telling how Mr. Platt organized and conducted the campaign for the election of Roosevelt. It is by a gentleman who was actively engaged at the Republican headquarters during the campaign and who gives a vivid picture of the perfection to which political organization has been carried in New York state by the most astute of managers. The wary old Senator who has been a life-time in politics and the youngest political aspirant will alike find food for reflection in Mr. Blythe's article.

JANUARY LADIES' HOME JOURNAL. The New Year's *Ladies' Home Journal* gives assurance of a purpose to make that magazine more useful and helpful, and stronger in its literary and artistic features, during 1899 than ever before. It contains a number of practical articles, besides a score of features of lighter interest, and opens with a full page drawing by W. L. Taylor, illustrating Long-

fellow's Village Blacksmith. Early Colonial social life is mirrored in "The Most Aristocratic Social Event in America"—the annual ball of the Philadelphia "Assembly," an article that will be read with unusual interest. A close-range view of strong interest is given Leschetizky, by Cleveland Moffett, who discloses the methods of "The Man Who Taught Paderewski," and Elizabeth G. Jordan tells "What it Means to be a Newspaper Woman," a subject upon which she writes from her own experiences.

Edward Bok, in the January *Journal*, writes on "The Rush of American Women," making a plea for more repose, through which the real pleasures of life are to be extracted. In fiction the experiences of "The Girls of Camp Arcady," "The Minister of Carthage" and "The Jame-sons in the Country" are continued. The first of a series of articles on "The House Practical" details how to furnish and decorate the hall and staircase, and other page features give photographs of "Fifteen Good Halls and Stairways," and "Pretty Rooms of Girls." Mrs. S. T. Rorer tells how to carve and serve meats and game, and gives a variety of menus for small social affairs. There are numerous other practical articles upon subjects of helpful interest in the household. By The Curtis Publishing Company, Philadelphia. One dollar per year; ten cents a copy.

LIPPINCOTT'S MAGAZINE FOR JANUARY.—The complete novel in the January issue of *Lippincott's* is "The Mystery of Mr. Cain," by Miss Lafayette McLaws, daughter of the Confederate general of that name. The scene is in Georgia, and the plot is so uncommon that to reveal it would be unfair to the reader.

"The Other Mr. Smith" is a society story—but of the unconventional kind—by Ellen Douglas Deland.

"John Rutland's Christmas," by Henry A. Parker, is a tale of practical philanthropy, personally administered.

In "Black Feather's Throw" Joseph A. Altsheler deals again with the times when Indians tortured their white prisoners and burned them at the stake.

The history of an ill-fated empress—"Poor Carlotta," wife of Maximilian of Mexico—is told by Lucy C. Lillie.

Charles Cotesworth Pinckney revives "The Great Debate of 1833," in which Calhoun bore a prominent part and was opposed by Webster.

Dr. Felix L. Oswald offers "An International Study on Liberty," bringing out the widely differing significations which the word is made to bear, or aspects of the thing that are insisted on, by different races or sets of men.

"Fin de Siècle Individualism" is brought to book by Gertrude Evans King.

"A Reporter's Recollections"—of work and incidents in the West some fifteen years ago—are supplied by J. L. Sprogle.

Under the caption "Why I did not become a Smuggler," L. C. Bradford tells of an adventurous trip in Texas in 1878-9.

The poetry of the number is by May Riley Smith, Dora Reed Goodale, Arthur D. F. Randolph, Charles G. D. Roberts and Harrison S. Morris.

Several features of striking interest will be found in the opening numbers of *The Living Age* for the new year. The number for January 7 contains, among other things, a pungent and wholesome lecture on Art and Morality, by M. Ferdinand Brunetiere, which is translated for the magazine and copyrighted by it; the first instalment of *The Etchingham Letters*, which are attracting wide notice in *The Cornhill* by their cleverness; and the beginning of a short serial. The number for January 14 gives the full text of Lord Rosebery's recent address on Literary Statesmen, which has been the subject of general comment; an article from Blackwood's on The Ethics of Conquest, which relates to the Philipines; and a bright paper on The Madness of Mr. Kipling.

—:o:—

Thyme, 100 grams, water 700, make an infusion and add syrup of marsh-mallow 50. Teaspoonful eight to twelve times daily for whooping-cough.—*Noevius, Ex.*

Correspondence.

A CORRECTION.

Editor New England Medical Monthly:

Your magazine sent to me last week has helped me in a case of tinnitus aurium and you may send it regularly. I think, from what I have seen of it, that it is an excellent journal. I noticed that you quote the *American Practitioner* as the authority for cobalt nitrate being an antidote for hydrocyanic acid. I think the authority for that antidote is Dr. Johann Aucas, a noted Hungarian toxicologist, who discovered it several years ago.

Very respectfully,

J. W. Bauman, M. D.

Lansdale, Pa., Jan. 24, 1899.

—:o:—

Abstracts.

ASEPTIC CATHETERISM.—Dr. C. Mansell Moullin has given an interesting and practical paper to the London *Lancet* of September 10, on the subject of urinary fever at the beginning of catheter life and of aseptic catheterisms. He says of aseptic catheterism that it is one of the problems of modern surgery. He has been called upon to deal with it especially in cases of which there has been a large amount of residual urine. The following are the essential features of Dr. Moullin's very successful measures. All instruments must be disinfected first by boiling. The hands, the prepuce and the skin of the penis must be cleansed as thoroughly with soap and water as if a surgical operation were going to be performed, and then sponged over with a solution of corrosive sublimate, 1-5000. The glands of the meatus require especial care. An irrigating catheter is then introduced into the fossa navicularis, and this part of the canal is thoroughly washed out from behind with boric acid. Then the catheter is pushed on into the deep part and the process repeated. Finally Melchior's double catheter is introduced and the urine drawn off. In this way it is possible to obtain a very high degree of asepticity. When catheters

have to be passed at frequent intervals, the disinfection of the hands, penis and front part of the urethra will manifestly be never carried out each time. At the outside it will only be done night and morning, and often one has to be content if it is done thoroughly once a day. But catheters can be kept clean. Those made for me, as smooth and polished on the inner surface as they are on the outer, will stand boiling day after day (if they are kept straight while in the boiling water and drained afterward) and continued immersion in boric acid without injury. Each patient is provided with two glass catheter cases. One of these is filled with boric acid lotion for instruments that have been used; the other, provided with a rubber cork as well as a metal cap, is dry and aseptic. These cases are so arranged that they can be hung up in the patient's wardrobe, out of sight and out of dust. No catheter is used more than once a day. As soon as a catheter is withdrawn from the urethra it is dropped into the case filled with boric acid solution and left there. Once a day all the catheters are taken out, boiled for five minutes, and placed in the dry case until required. The plan is not perfect and I have no doubt is capable of improvement, but it works fairly well with an intelligent private patient who can be made to understand the necessity of observing strict precautions. Unfortunately they are not all intelligent, and in the case of a hospital out-patient such a complicated plan is out of the question. The best that can be done is to start such people as well as possible and hope that by degrees they will acquire a certain amount of immunity against the toxins they are bound to absorb. There is a little evidence to show that a certain degree of immunity may be acquired, but I am very skeptical as to its ever being sufficient in the face of a virulent growth, or when the bacterium coli is assisted by other germs, such as the streptococcus and the proteus.

Ex.

SHALL IT BE "SURGICAL INTERFERENCE" OR "SURGICAL INTERVENTION"? We have never understood why

authorities in surgery use the word "interference" when speaking of operative or surgical treatment. When a surgeon performs an operation for the correction of a deformity, the mitigation of pain, or the saving of life, does he mean to say that he interferes? If it be interference, then he is culpable; but certainly no operator will plead guilty to the charge of doing meddlesome surgery, and the inevitable conclusion is that the term "surgical interference" is a misnomer. Whenever we read it in text-books, or in current literature, we feel like substituting the word *intervention* for "interference," using the word *intervention* in the sense of interposition, or, better still, mediation—a coming between for a friendly purpose. The word *interference* suggests the idea of collision, clashing, opposition, officiousness, intermeddling, etc.

According to Webster: "A man may often *interpose* with propriety in the concern of others; he can never *intermeddle* without being impertinent or officious; nor can he *interfere* without being liable to the same charge, unless he has rights which are interfered with."

Let us see what Trench has to say. We quote: "In our practical use, *interference* is something offensive. It is the pushing in of himself between two parties on the part of a third who was not asked, and is not thanked for his pains, and who, as the feeling of the word implies, had no business there; while *interposition* is employed to express the friendly, peace-making mediation of one whom the act well became, and who, even if he was not specially invited thereunto, is still thanked for what he has done."

A few days ago we suggested this improved phraseology to two of our surgical friends, both of whom are teachers of surgery and liberal contributors to surgical literature. They agreed with us that the point was well taken, and announced it as their intention to adopt the suggestion. Speaking for ourselves, this journal will hereafter use the term *surgical intervention* instead of *surgical interference*, and we shall hope to see its general adoption by surgical writers.

Richmond Journal of Practice.

PHENOCOLL AS AN EFFICIENT REMEDY IN MALARIAL FEVERS.—Phenocoll (Amido-aceto-phenetidine) was derived from phenacetin (Para-acet-phenetidin) by Hertel.

It is hardly soluble in water, but combined with acids, gives soluble salt; the hydrochlorate and the acetate.

Phenocoll was originally known only by its anti-pyretic, anti-neuralgic, and anti-rheumatic actions.

But, since Mosso studied its therapeutic and physiological action, and Albertini, by his experiments, demonstrated positively its anti-malarial power, clinical researches were undertaken by the followers of these men, and in time Albertini's conclusions were verified.

A great physiological and clinical contribution, on this specific action of Phenocoll, was made by a former professor of mine, V. Cervello.

He demonstrated that this therapeutic agent, as an anti-malarial remedy, could well take the place of quinine, and in some conditions was superior to it. It has great absorbent power and anti-thermic action without possessing those deleterious effects exhibited by quinine.

A very elaborate study was devoted to this subject by Professor Golgi.

On the base founded by my masters I have tried Phenocoll on all those febrile conditions diagnosed by me as malarial—both in adults and children.

The salt which I employed in all the cases was the hydrochlorate only. The doses prescribed varied from $1\frac{1}{2}$ grams to 2 grams daily for adults and from $\frac{1}{3}$ to 1 gram daily for children.

I have had brilliant results. Sometimes the amelioration was temporary. In such cases, which were generally chronic and of many years' standing, I give a hypodermic injection of the bi-hydrochlorate or of the hydrochlorosulphate of quinine first, and soon after gave a generous dose of the Phenocoll salt (gm. 0.50 or a little more or less according to the case) repeating it every two or three hours for three or four doses.

In some cases its effects have been negative. In these cases I believe its administration was too far from or too close to the next paroxysm,

which could not be controlled by the drug owing to its not meeting with a sufficient quantity in the system, either through elimination or insufficient absorption.

I have found it satisfactory to administer the doses every two hours provided the last dose be given at least an hour and a half before the advent of the next paroxysm. Sometimes the effects are fruitless, notwithstanding all directions were correctly observed. In these cases the fault may lie in the quantity or frequency of the dose, which may be too small or too infrequent for the case in hand.

I have my views of this remedy on the observation of over a hundred cases of malarial fever, upon which I have tried it during the past few years. In all these cases I have met with only a few failures, and these, I think, were not due so much to the action of the drug as to the method of using it.

When Phenocoll is used as widely and extensively as quinine is to-day we may find that it is a specific that has no failures.

I append a few selected cases:
CLINIC CASES TREATED BY PHENOCOLL
HYDROCHLORATE.

First patient: P. B., aged 32 years; splenic tumor; temperature, 40.5° C. Gm. 1.50 of Hydrochlorate Phenocoll was administered in three doses. On the next day the temperature was 38° C. By the same doses, repeated once more, the fever ceased. They were continued four days more, for precaution. Recovery.

Second patient: F. M., aged 25 years, female; temperature, 40° C., having been feverish for twenty days. The same treatment and the same result.

Third patient: R. B., aged 22 years; and fourth patient: F. T., aged 65; both had been feverish for about twelve days. After a daily dose of gms. 2 of Hydrochlorate Phenocoll, they recovered after the first administration.

Fifth patient: N. C., aged 26, female; sixth patient: M. A., aged 24; and seventh patient: G. P., aged 32; were suffering with cold chills for about a month. Fever stopped after the first administration of gms. 2 of the salt of Phenocoll in four doses,



HYDROZONE (30 volumes preserved aqueous solution of H_2O_2)

IS THE MOST POWERFUL ANTISEPTIC AND PUS DESTROYER.
HARMLESS STIMULANT TO HEALTHY GRANULATIONS.

GLYCOZONE (C. P. Glycerine combined with Ozone)

IS THE MOST POWERFUL HEALING AGENT KNOWN.

These remedies cure all diseases caused by Germs.

Successfully used in the treatment of Infectious and Contagious diseases of the alimentary canal:

Typhoid Fever, Typhus, Yellow Fever, Cholera Infantum, Asiatic Cholera, Dysentery, Etc.

Send for free 240-page book "Treatment of Diseases caused by Germs," containing reprints of 120 scientific articles by leading contributors to medical literature.

Physicians remitting 50 cents will receive one complimentary sample of each, "Hydrozone" and "Glycozone" by express, charges prepaid.

Hydrozone is put up only in extra small, small, medium, and large size bottles, bearing a red label, white letters, gold and blue border with my signature.

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Reliable Medical Suggestions

How to Treat a Cough

In an able article under the above heading in the *New York Medical Journal*, Edwin Geor, M. D., Physician in Charge of the City Hospital Dispensary; also Physician in Chief, Outdoor Department, Maryland Maternite Hospital, Baltimore, writes:—

"The object of this brief paper is not to try to teach my colleagues how to treat a cough, but simply to state how I do it, what good results I get, and to call their attention to those lighter affections of the throat and chest the principal symptom of which is an annoying cough, for which alone we are often consulted. The patient may fear an approaching pneumonia, or be anxious because of a bad family history, or the cough may cause loss of sleep and detention from business. What shall we do for these coughs? It has been my custom for some time to treat each of the conditions after this general plan: If constipation is present, which is generally the case, I find that small doses of calomel and soda open the bowels freely, and if they do not, I follow them with a saline purgative; then I give the following:

R Antikamnia and Codeine Tablets, No. xxx.
Sig.: One tablet once every four hours.

"The above tablet contains four grains and three-quarters of antikamnia and a quarter of a grain of sulphate of codeine, and is given for the following reasons: The antikamnia has a marked influence over any febrile action, restores natural activity to the skin, and effectually controls any nervous element which may be in the case. The action of the codeine is equally beneficial, and in some respects enforces the action of its associate. The physiological action of codeine is known to be peculiar, in that it does not arrest secretion in the respiratory or intestinal tracts,

while it has marked power to control inflammation and irritation. It is not to be compared with morphine, which increases the dryness of the throat, thus often aggravating the condition, while its constipating effect is especially undesirable."

The London Lancet's Endorsement

"Antikamnia is well spoken of as an analgesic and antipyretic in the treatment of neuralgia, rheumatism, lagrippe, etc. It is a white powder of a slightly bitter taste and alkaline reaction. It is not disagreeable to take, and may be had either in powder or tablet form, the latter in five-grain size. It is described as not a preventive of, but rather as affording relief to, existent pain. It appears to exert a stimulating rather than a depressing action on the nerve centers and the system generally."

The Prompt Solution of Tablets

We are glad to know that the Antikamnia people take the precaution to state that when prompt effect is desired the Antikamnia Tablets should be crushed. It so frequently happens that certain unfavorable influences of the stomach may prevent the prompt solution of tablets, that this suggestion is well worth heeding. Antikamnia itself is tasteless, and the crushed tablet can be placed on the tongue and washed down with a swallow of water. Proprietors of other tablets would have had better success if they had given more thought to this question of prompt solubility. Antikamnia and its combinations in tablet form are great favorites of ours, not because of their convenience alone, but also because of their therapeutic effects.—*The Journal of Practical Medicine*.

WALTER E. MORRISON, PRES.

W. E. DOW, TREAS.

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FOR...

**PHYSICIANS,
SURGEONS
and
DENTISTS**

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The digestive power of
Lactopeptine is
much greater than
any preparation of
Pepsin, as it has the
advantage of action
upon all kinds of food,
while Pepsin only
digests the proteids.
It is therefore indicated
in all cases of abnormal
digestion, intestinal as
well as stomacheic

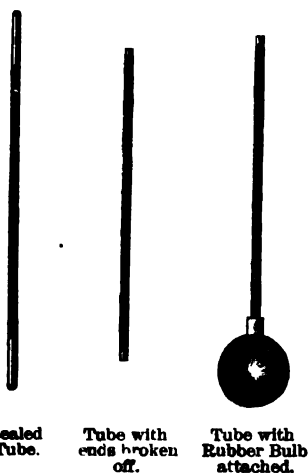
The N.Y. Pharmacal Co.
Yonkers, N.Y.

Glycerinated Vaccine

(P., D. & Co.)

WE ARE NOW PREPARED TO SUPPLY GLYCERINATED VACCINE SECURELY SEALED IN INDIVIDUAL GLASS TUBES.

BACTERIOLOGICALLY AND PHYSIOLOGICALLY TESTED.



Applying the Vaccine to patient's arm.

Our GLYCERINATED VACCINE is marketed in capillary tubes, each holding sufficient for one vaccination. As soon as the patient is ready to receive the VACCINE, the operator will break off each end of the tube and expel the contents by means of a small rubber bulb which is furnished with each package of ten tubes. The VACCINE is applied directly from the tube to the patient's arm (or whatever portion of the body is chosen as the site of inoculation).

GLYCERINATED VACCINE is aseptic vaccine—the pulp of cowpox vesicles mixed with pure glycerin for the destruction of the comparatively few streptococci or other bacteria likely to be present despite the most careful manipulation of the vaccine-producing animal. Glycerin is not a powerful germicide; but it is powerful enough, as we have abundantly demonstrated in our Bacteriological Laboratory, to render germ-free in a short time the vaccine to which in our hands it is applied. Moreover, it is perfectly harmless when applied to the abraded skin in connection with the prophylactic use of the vaccine.

To those who are in the least acquainted with our methods of serum production it will be unnecessary for us to state that in the elaboration of vaccine we guard every step with the most uncompromising scrutiny and assure the purity of the product by the most rigid antiseptic and aseptic measures. The heifers before being vaccinated are tested with tuberculin. As an additional safeguard the animals are slaughtered as soon as the vaccine is collected, and a careful inspection of the carcass is made by an experienced meat-inspector; if any evidences of disease are found the vaccine is destroyed.

“Points” are Unreliable and Unsafe.

It is a noteworthy fact that manufacturers of vaccine have generally ignored those rules of rigid surgical asepsis which have been recognized for years as absolutely necessary when the physician desires to make a break in the healthy skin of his patient. As a result, septic infection after vaccination has been commonly met with in general practice. The object of the product now offered by us is to produce infection with pure cowpox and to avoid the sores and sloughs which naturally follow the use of vaccine material carelessly prepared and often loaded with the organisms of ordinary pus.

In 1894 the Columbus Medical Laboratory of Chicago made a careful examination of eleven different varieties of vaccine “points,” made by as many manufacturers, and only one was found to be free from bacteria and blood-cells. Of the rest, several were decidedly unfit for use.

But, notwithstanding all our aseptic methods, vaccine, like other moist physiological products no matter how carefully prepared and protected, is liable to deteriorate after a certain period of time. For this reason we affix the date of shipment to each package, and authorize the drug trade to give fresh VACCINE in exchange for any quantity of unused and deteriorated virus purchased from us in good faith.

Parke, Davis & Co.,

Home Offices and Laboratories, Detroit, Michigan.

Branches in New York, Kansas City, Baltimore, and New Orleans

taken daily, which were repeated for four days more. Recovery.

Eighth patient: G. T., aged 45. This case required special attention: he was cachectic; had used quinine for a long time fruitlessly. Paroxysms have disappeared since the first administration of gm. 2 in four doses daily of Hydrochlorate Phenocoll. He was under treatment for several days more because of his poor general condition. He recovered completely.

The maximum of interest is attached to the following case: T. B., aged 5 years, had had malaria for twelve months; rebelled to all salts of quinine administered by mouth and hypodermic injections. He had an enormous splenic tumor, was anæmic and malnourished. The first day I give a dose of gms. 0.75 in two doses of Hydrochlorate Phenocoll; no result. I repeated them for three days more without any result. Then I administered gm. 1 of the same salt in 8 doses daily. A very sensible amelioration commenced to be shown after the first administration. The same daily dose was repeated for six days more. Paroxysms stopped. Then the boy was treated for his alarming general condition, and recovered.

I could continue to report the result of seventy-five cases more, forty-five of which were chronic. Here Phenocoll showed brilliantly its great anti-malarial power much more than quinine, which remained fruitless, after having been already administered in different ways and forms for a long time.

Cesare Mondini, M. D.

The Therapeutic Forum.

COBRA BITE TREATED WITH TOBACCO ASH; RECOVERY.—Dr. Tricamlall Mayanlall (*Indian Medical Record*, September 16th) says that while attending to the roof of her house on the morning of July 7, 1898, Tijee, a Hindu female, aged twenty-three years, was bitten on her right wrist by a cobra. The wounds bled pretty freely, but as the woman was in a semi-conscious condition when brought to the dispensary at about noon, her face was freely doused by an infusion of *neem* leaves for nearly

fifteen minutes. This rallied her somewhat and at 1 P. M. she was sufficiently conscious to complain of feeling drowsy and asked us not to disturb her.

A quarter of an hour later she was made to swallow sixty grains of tobacco ash—the residue obtained by smoking tobacco mixed with treacle and certain aromatics and consumed in a *hookah*, or Indian pipe—and this was repeated thrice at half-hour intervals; but at 2.10 P. M. she vomited a quantity of clear, watery matter, and an hour later sat up, saying she felt less drowsy, though there was a good deal of nausea and headache. She was given some neem leaves to chew, and the tobacco ash reduced to twenty-grain doses at forty-five minute intervals till 7 P. M., when the giddiness left her and she was given some milk to drink. At 10 P. M. she was given her *last* dose of twenty grains of tobacco ash—making in all three hundred and sixty grains—and kept on milk diet for the remainder of the night, during which she was not allowed to close her eyes. No further treatment was necessary and the woman left the dispensary well on the morning of July 8th.

Dr. Mayanlall has successfully used tobacco ash in *five* other cases. A curious feature in this case was that when the woman chewed the *neem* leaves at 2 P. M., she said they tasted sweet, though at 4 P. M. she recognized their natural bitter taste.—*N. Y. Medical Journal.*

POISONING BY "HEADACHE POWDERS."—Dr. Robert W. Greenleaf (*Boston Medical and Surgical Journal*, October 13th) records the case of a woman to whom he was called in consultation by Dr. Coggeshall. He describes her condition as follows: "The symptom which especially attracted our attention was the extreme degree of cyanosis. This was of a peculiar bluish tinge. It was most marked in the fingers and lips and it spread out into surrounding areas in a diffuse fashion. Her pulse was weak, but otherwise she did not appear so ill as the degree of cyanosis would lead one to expect. Examination of the heart, lungs and urine did not reveal a suf-

ficient cause for her condition. A few râles from a chronic bronchitis and a weak heart were the only noteworthy signs excepting the cyanosis.

"The immediate treatment," he says, "consisted of rest and aromatic spirits of ammonia. Under these her strength gradually returned."

It appears that the patient had bought a packet of powders purporting to be a positive cure for sick and nervous headache. Analysis showed that each powder contained three grains of acetanilide and two grains of phenacetine, with a little caffeine. She had taken five of these powders during the night, and had thus ingested in all fifteen grains of acetanilide and ten grains of phenacetine. *N. Y. Med. Jour.*

EXPERT TESTIMONY IN GERMANY. The Berlin correspondent of the *Medical News* says:

"A recent decision of the German Reichsgericht (court of last resort), at Leipzig, in the matter of expert medical testimony seems of special interest to medical men generally. It settles an extremely knotty question, in which doctors have usually been imposed upon while in the witness stand, and for which, so far, they have had no redress. The doctor who wins his suit had been summoned as an ordinary witness, and was offered the ordinary fees for such services, which are, of course, extremely small. During the course of his examination under oath, however, he had been asked some questions that brought out not only his knowledge of the facts of the case, but his medical opinion as to certain of these facts. He answered the questions, but refused to accept ordinary witness fees as a compensation and sued for medical expert fees, the amounts of which are definitely settled by German law. The defence was that he had been summoned as an ordinary witness and sworn as such, and that consequently and according to immemorial usage he was entitled only to ordinary witness fees. The lower courts, I believe, decided against him, but the Imperial Court viewed the question from a higher plane of equity than the commonplace of usage, and decided that a

medical opinion given by a doctor under oath is expert evidence, and must be paid for as such, even though the doctor had been summoned and sworn as an ordinary witness.

So far it has been the custom to say that the doctor must himself guard against answering questions that included the expression of his medical opinion on the facts in such cases. But this has been manifestly unfair. It throws the burden of maintaining his rights on the witness at a moment when, perhaps, all his presence of mind is required to keep his facts from being twisted into perverse significance by an acute lawyer thoroughly accustomed to cross examination. Besides, even after the most careful protesting as to the answering of certain direct questions expressive of medical opinion, a sharp cross-examiner is often able to so manage the recital of the facts and their connections and relations that an inference of medico-legal value quite sufficient to be of use in influencing the jury is secured.

This new decision relieves the doctor of all further need for watchfulness in the matter. He simply answers all questions put to him to the best of his knowledge. If in the opinion of the court his answers include the expression of medical opinion, then his evidence must be paid for as expert medical evidence. Let us hope for some such thoroughly simple and satisfactory and eminently just settlement of the question in America."—*Mtd. Rev. of Revs.*

THE SEAT OF THE APEX BEAT IN TUBERCULOSIS.—Morano has re-investigated this subject in the light of Cardile's statement that the apex beat was displaced inward in tuberculosis and early tuberculous disease of the lungs. He examined 150 subjects, divided into three classes: (1) healthy and going about, (2) non-medical cases laid on their back, (3) medical cases confined to bed. In the first two classes the apex beat was in the fourth intercostal space in 67 per cent. and in the fifth in 33 per cent. of the cases. In females the percentage of cases in which the

apex beat is in the fourth space is rather higher. Age tends to lower the position of the apex beat. In about half the cases the apex beat ascended to the fourth space and a little inwards in changing from the erect to the supine position. In the third class of cases the apex beat of tuberculosis of the lungs was in the fourth and fifth spaces six and seven times respectively. Speaking generally the author states that in disease producing obstruction to the lesser circulation the apex beat is lowered. Owing to mistaking the claviculo-costal space for the first intercostal space, the fifth intercostal space of many authors is really the fourth. As far as the author's observations have gone with reference to the inward displacement of the apex beat in tubercle they do not confirm those of Cardile.—*Rif. Med.*

NEW AND RAPID PROCESS OF DOUBLE-STAINING BLOOD.—*La Sem. Méd.* takes from *Cronica Méd. quir. de la Habana* the following process of Garcia Rigo, which he has successfully employed for some time for rapid double-staining of blood. A drop of blood on a cover-glass is diluted with a drop of simple bouillon (kept sterile by a little formol), the two being stirred till mixed by a sterile platinum wire. The cover-glass is then rested on the end of a slide and carefully warmed over an alcohol flame for less than a minute. Eosine stain is next used and washed with water; then methylene-blue, and washed again. The specimen is then dried and mounted in Canada balsam, the whole process being accomplished in five minutes under favorable circumstances.—*American Medico-Surg. Bulletin.*

TUBERCULAR INFECTION BY SPUTUM. Edwin Klebs (*Chicago Medical Recorder*) says that the prevalent belief in the efficacy of dried tubercular bacilli in spreading infection is erroneous. For the most part the bacilli are killed by ordinary desiccation. He has made some experiments on the extension of the bacilli by coughing. Glass plates 6 inches long and $3\frac{1}{2}$ inches broad were held by the pa-

tients when a coughing spell came on, 6 inches distant from the mouth. The first plate obtained in this manner from a patient after his morning cough showed after staining with carbolfuchsin and methylene blue, and mounting in a thin solution of Canada balsam in xylol, seventy-five blue-stained spots, the smallest barely discernible to the naked eye, the largest oval-shaped with diameters of two and three lines, the medium forms round, a line in diameter. The three largest spots were all on the deepest part of the glass around an area differently stained in deep blue; the latter probably corresponded to the thumb pressed upon the glass, free from expectorated substances. The larger spots contained almost exclusively epithelial cells from the mouth, with very few tubercle bacilli. The tubercle bacilli, mostly lying upon mouth epithelial cells, seemed to be deposited upon the surface of the mouth or pharynx.

Many of the medium forms consist almost exclusively of mouth epithelial cells and contain no tubercle bacilli. But many of them are totally or nearly free from mouth epithelium and are composed only of smaller elements. Seen with a weak power one recognizes these forms very easily and can study them better by mounting these parts with cover-glasses and balsam. Many of these spots, a millimeter in diameter, contain a relatively great number of tubercle bacilli.

The large cavities producing large yellow balls of "coin-like" shape, sinking to the bottom in water, are not the features which mostly endanger the surroundings of a phthisical patient; but the finer drops ejected like a drizzling rain and carried away by the forced expectoration in coughing. From the danger of contamination in this way other people cannot be shielded by the use of the small sputum bottles, but only by covering the mouth during a coughing spell by sheets of linen or fine paper, such as closet paper, that must be burned after having been used.

The author thinks his experiments show that herein lies the greatest danger of the spread of tubercle in hospitals and families.—*Ex.*

SPONTANEOUS RUPTURE OF THE UTERUS DURING LABOR.—M. Treyman (*St. Petersburg med. Wochenschrift*, Aug., 1898) reports a case. The patient had had two abortions and six births, each with some complication. The true conjugate was but 9 cm. Prompt measures for delivery of the child and suturing the uterus saved the mother's life. The small conjugate, together with extremely thin, poorly nourished uterine walls, was responsible for the accident. Treyman quotes Winckel's statistics on frequency of rupture of the uterus as follows: Collins, 1—482 births; McClintock, 1—737; Bandl, 1—1,200; Jolly, 1—3,403; Ramsbotham, 1—4,429.—*Ex.*

IN LARYNGEAL OR WINTER COUGH. Dr. Walter M. Flemming (*Journal of Nervous and Mental Disease*) says, that in acute attacks of laryngeal or winter cough, tickling and irritability of larynx, antikamnia and codeine tablets are exceedingly trustworthy. If the irritation or spasm prevails at night the patient should take a five-grain tablet, containing $4\frac{3}{4}$ gr. Antikamnia and $\frac{1}{4}$ gr. sulphate codeine, an hour before retiring and repeat it hourly until the irritation is allayed. Allow the tablet to dissolve slowly in the mouth, swallowing the saliva. After taking the second or third tablet the cough is usually under control, at least for that paroxysm and for the night. Should the irritation prevail in the morning or at midday, the same course of administration should be observed until subdued. In neuralgia, in short, for the multitude of nervous ailments, he doubts if there is another remedial agent so reliable, serviceable and satisfactory, and this, without establishing an exacting requirement, or habit in the system, as morphine does.—*Ex.*

PLASTIC SURGERY OF CERVIX UTERI. H. P. Newman (Chicago) presented a communication on the indications for plastic surgery of the cervix uteri, with a new method of operating. He stated that the operation of trachelorrhaphy had been in vogue 25 years, but of late years it had been replaced by amputation of the

cervix and modeling of the cervix. Emmet now said that with a few exceptions amputation was the better plan. Newman said he had developed a new method of operating. The indications for amputation were malignant disease, enlargement and hyperplasia of the cervix, conical cervix, incurable laceration, chronic metritis and cervicitis, uterine displacements, congenital elongation and cervical stenosis. Cervical stenosis was the bottom of much pelvic pathology. The technique of the operation was as follows: After the usual preparatory treatment the patient was placed in the Sims or lithotomy position, the cervix drawn down and the uterus curetted. The bullet forceps was then reversed and introduced into the cervix and traction made from within. The cervix was next transfixed with a knife, and a clean cut made from above downward in the anterior lip. The posterior lip was transfixed and cut in a similar manner, and the plug of intervening tissue removed with curved scissors. If the flaps had been properly made they fell together and covered the portion removed, assuming the appearance of the normal cervix. Sutures were then introduced in four groups, anterior, posterior and lateral. A tampon was introduced and retained for twelve days. The sutures were removed in two weeks. Newman proposed the name of "tracheloplasty" for the operation as a more descriptive name than trachelorrhaphy or amputation of the cervix.—*British Medical Journal.*

PILLS UNDER THE HAMMER.—Last year attention was called by an American pharmacist to the fact that coated pills generally could be driven without breaking into a board of wood, but that friable pills break down in the process. This startled everybody until a philosopher showed that many soft things can be driven into wood, and even that clay can be made to penetrate an inch armor plate; it was also explained that friability and solubility do not necessarily go together. To all this has now to be added a paper by Mr. C. C. Sherrard, which is reprinted in "*The New Idea*," and in which it is

proved that the gelatin coating of pills, while not at all interfering with their solubility, is an admirable buffer to percussion. Then Mr. Sherrard goes on to show that crystals of potassium sulphate, tartaric acid, sugar, borax, caustic soda, potassium bromide, and many other very soluble substances can be driven into the wood by a hammer without fracture. He shows the photograph of twenty-seven substances so treated. But the real object of his paper is to prove that mass pills are more soluble than friable pills, which he does; and as the makers of the latter originated the hammer idea, they must be beginning to be sorry that he did not stick to the thumb.—*Chemist and Druggist*.

—:o:—

Therapeutic Notes.

THE TREATMENT OF PULMONARY PHTHISIS.—The opinion has been held that the development of phthisis is preceded and accompanied by appreciable disorder of the digestive system. Particularly is this true of pulmonary phthisis. It is now known that pyogenic germs work conjointly with the tubercle bacillus in disintegrating lung tissue.

In fact, the pus forming germs constitute the more formidable factor as to the force of invasion, as evinced by the remarkable experimental researches of Koch of Berlin. His tuberculin cure was indeed a sad disappointment for the reason that it simply attacked the tubercle bacillus, and this to a minimum extent without in the least affecting the general phthisical dyscrasæ.

With the lights of the day before us it seems consistent with good judgment to employ those methods at command which at least promise antisepsis constitutionally—notwithstanding the various methods in vogue during the past years for amelioration or cure in bacterial disease.

Cod liver oil is considered in this article, as is customary, in connection with the medicinal treatment. It has, however, little or no claim to be classed as a medicine.

It has some adherents in the treat-

ment of phthisis, yet the authorities of the day discourage it rather than use it. It often occasions nausea and diminishes the appetite or gives rise to eructations, and in such event is absolutely contra-indicated. After all, it could under the best circumstances be considered only as an article of diet. When destructive changes in the lung ensue, as in the stage of softening, cod liver oil is positively harmful, for the reason that it produces fat intoxication.

Its combination with the hypophosphites has been pretty largely employed in different countries, but without effects sustaining any just claim of having a specific action.

Pulmonary phthisis, unless greatly advanced, (i. e. both lungs involved extensively) is usually readily checked. The careful practitioner will recognize in this particular the merits of Angier's Petroleum Emulsion, as its antiseptic constituents are so eminently suited to diseased lung tissue and to the general system.

It does not tax the digestion—is always most soothing and grateful to the patient and is perfectly assimilable. The Petroleum Emulsion is typically nutrient, which is soon manifested by the increase of weight and generally improved condition of the patient. The gastro-intestinal tract is quickly responsive in activity and is not depressed nor irritated by its use.

Bronchial hemorrhage is not, as a rule, an unfavorable event in the case of phthisis. It does not follow from this fact that the hemorrhage should not be arrested. This tendency to hemorrhage can best be controlled by the administration of arsenic between the attacks. The arsenical preparation selected by many competent observers is Arseno-auro, the Liq. Bromide of Gold and Arsenic, in ten-drop doses three times daily after meals. Here where it is desirable to continue the remedy for a considerable period the dose should not be increased. For obstinate diarrhoea the Subjugate of Bismuth is useful.

Cough is, of course, necessary for removal of the morbid products within the bronchial tubes and cavities. If the act of coughing be accompanied by expectoration, palliation is not required. But often there

is what may be called a superfluous cough. Frequently this prevents sleep. Palliative remedies are then indicated, and great care should be observed in this selection.

The following formula is most useful in allaying irritable cough and preventing night sweats:

R. Liq. morphiæ (Magendie), gtt. xxx.

Liq. atropiæ, B. P., gtt. vj.

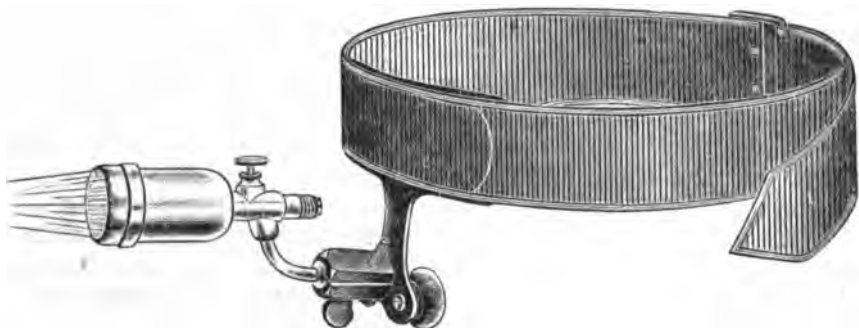
Ac. hydrocyanic, dil., gtt. xxx.

Ether chlor., 3 j.

Syrup pruni. virg., or symp. Tolu.

M. Sig. 3 j pro re nata.

The headlight which is here illustrated is one of the attachments to be used with the Dow Portable Electric Assistant (see announcement on page xx), and the only instrument now in existence with which physicians can throw a direct light through



a cystoscope or urethroscope. The reflector is so small that it can be placed between the eyes and does not obstruct the view in the least. It throws the light straight with the vision. One can see distinctly through a tube one-eighth of an inch in diameter and eight inches long. It can be focused so that it will throw an intense light, not covering a space over one-half inch in diameter ten inches from the eye; or can be made to cover six inches at the same distance for surface work. This is done by the means of a double condensing lens. It is the best thing of the kind ever put on the market. For obstetrical work it cannot be surpassed. Any physician must at once see the value of this instrument, and it should receive the success it merits.

The Dow Portable Electric Assistant provides another very useful instrument, namely, the "Otoscope."

We cannot illustrate it here for lack of space. Suffice it to say the small electric lamp is placed in it in such a manner that the rays are thrown directly through the tip, and does not in any way interfere with the vision; the operator looking through a magnifying lens which enlarges the object being examined, notably the ear and nose, can obtain a clear sight, thereby being able to detect any trouble and treat the same intelligently. It is a valuable instrument and something the up-to-date physician would not be without after once making an examination with it.

And these are only two of the attachments of the Dow Portable Electric Assistant. To describe the Assistant complete would require the use of twelve to fifteen cuts, for which of course we haven't room here; but if you will write to the company and mention the *NEW ENGLAND MEDICAL MONTHLY*, they will

take pleasure in fully explaining the case to you and in sending you their illustrated catalogue. See page xx for address.

CONVALESCENCE FROM THE GRIPPE. One of the most unpleasant features of gripe cases is the prolonged period of convalescence, sometimes extending over several months, during which the patient struggles to regain his former vigor. This struggle may be greatly shortened by paying especial attention to promoting the vitality of the tissues and improving the quality of the blood. During the recent gripe epidemics cases have been especially characterized by disturbances of the gastro-intestinal tract, and after the patient has recovered from the immediate effects of the disease, he is often left in a dyspeptic state, rendering it very

difficult to administer nourishing foods and tonics. It is under these circumstances that the physician will find ferro-somatosé of great value, as it not only supplies to the tissues a large quantity of readily assimilated food, but at the same time the requisite amount of iron in such form that it will not tax the digestive functions, and will be readily converted into the iron containing principle of the blood. Being both a food and tonic, free from any disturbing action upon the digestive organs, as well as agreeable to the palate and capable of administration in a variety of fluids, ferro-somatosé commends itself especially during the prolonged convalescence of grippe cases.

A RATIONAL METHOD OF BRINGING UP INFANTS BY HAND.—Of course no method of rearing infants is so proper or so satisfactory as that of the maternal nursing. Under the normal conditions, the infant takes the milk from the breast at the right temperature (body heat) free from pathogenic organisms, and slightly alkaline in reaction.

Messrs. Allen & Hanburys of London, have lately opened a house in the United States for the sale of their well-known specialties, and have forwarded to us samples and particulars of their series of infants' foods. These foods, however, are not unknown to us, and we can with safety endorse all that is claimed for them. The manufacturers have gone back to nature, the fountain head, and have endeavored to produce, artificially, what nature supplies so early and abundantly. They have done more, and have recognized that a developing infant needs a progressive dietary so as to encourage and strengthen the various digestive functions which are in process of evolution during the earlier months of its life. In America we have long recognized that the old-fashioned methods of bringing up children are but poor substitutes for human milk. Cow's milk and barley water, and condensed milk, are each in their way unsuitable foods for infants, and were it not for the elasticity and accommodating power of nature, few

children brought up by hand would live to tell the tale of their early digestive sufferings.

Perhaps the greatest sin of all is expecting very young children, whose diastasic function is at the most but imperfectly developed, to digest starch. The introduction of humanized milk, and of various institutions for carrying out the formulæ prescribed by physicians for approximating cow's milk to that of the mother, have of late years sprung into existence. Still there is a great and crying need which these do not touch. There are many in this vast country far away from the great cities, who have neither the time nor the means to make or obtain the necessary article. There are again those who are travelling with infants to whom the carrying of humanized milk is a difficulty, if not an impossibility. To these, which, after all, form by far the greater majority of those whom nature compels to bring up their children by hand, this series devised by Allen & Hanburys, comes as a special boon. What is this series? The "Allenburys" infant foods are three in number. They are portable, sterilized, and being hermetically sealed in convenient tins, will keep equally well in a hot or in a cold climate.

The "Allenburys" Food No. 1 is a powder prepared from pure cow's milk, which requires only the addition of boiled, i. e., sterilized water, to make a food approximately as nearly as possible, physiologically, to human milk.

The excess of casein has been removed and the deficiencies in cream, albumen and milk sugar, made good. Allen & Hanburys found us that their foods are made in their laboratories in the country: that the milk is brought twice daily from dairies under their own control in sterilized cans, and prepared according to special processes. Electricity is employed as a motive power, this being generated by water power and not steam. The laboratories themselves are all lined with glazed bricks, so that the methods employed are as perfect as human foresight can devise.

Returning to the No. 1 Food. Experience in England has shown that

this should be given for the first three months of infant life. After this period, the diastasic capabilities of the human organization begin to appear, and having regard to this development, Allen & Hanburys have introduced their "Allenburys" Milk Food No. 2. This food is identical with the No. 1, but presents in addition, a small quantity of dextrine, soluble phosphates derived from whole meal, by malting, and maltose. This addition affords a useful and necessary stimulus to the now commencing amylolytic functions.

Many mothers at this period find, and say, that their milk is not good enough, and ignorantly fly to some thick farinaceous preparation. They are surprised that the child wastes instead of progressing, and here the difficulties of the physician begin. It is easy to recognize that they have overdone the feeding, and provided food which is anything but food, except in name, to their offspring. The No. 2 food fulfills this want for infants, naturally and artificially reared alike. It is recommended in the case of those fed entirely by hand that it should be continued from the third to the fifth, or even sixth, month of infant life.

So far, sterilized foods have been given, and the infant has thus escaped the dangers of death from specific fevers—typhoid, diphtheric, etc. But Nature cries out "Naturam expellas furcâ, tamen usque recurrit." A child fed too long on a sterilized food, like a mariner without fresh meat, will fall a prey to scurvy. The scorbutic tendency, however, does not evidence itself so early in life, or under so short a period of feeding. Allen & Hanburys insist that No. 1 and No. 2 Foods should not be continued after the end of the fifth month at the latest. It is time now to introduce a fresh element, and for this reason, as well as those of development, they have introduced their "Allenburys" Malted Food No. 3, which is prepared for use with fresh, unsterilized cow's milk.

The "Allenburys" Malted Food No. 3 is made from the finest wheat-flour especially selected on account of its richness in phosphates,

etc. This is carefully cooked in order to break up the starch granules, and then partially digested into Malt Extract according to the suggestions of Baron von Liebig. No undue tax is thus suddenly thrown on the infant economy, while it has enough work to stimulate and help its proper development. By this perfect method of preparation, no spicules of malt appear, as in the commoner forms of malted foods, and which act as irritating mechanical particles on the mucous membrane of the alimentary canal, often causing diarrhoea and other concomitant derangements.

The presence of pure, fresh, cow's milk, with which it is intended this food should be prepared, cannot be too strongly insisted on at this period, and we would caution those who are over anxious about infective milk-borne disorders, not to forget that fresh food is an absolute necessity at this period. If by fortuitous circumstances, the milk supply should not be above suspicion, and it is impossible to procure sound milk, then it is permissible, for a time only, to prepare this food with the food obtained by locating the No. 1 Food into boiled water, and so using approximately a humanized milk. Indeed, in a few cases, where the digestion is weak, it appears to us that the plan is a good one, when at first changing on to the farinaceous diet.

This Malted Food has been in use so long that its value as an invalid diet is now well recognized, especially in typhoid, when it may be combined with rice water with a view of checking the diarrhoea.

We have known it tolerated in conditions of gastric ulcer, when any other form of nourishment could not be injected without occasioning the most intense epigastric pain.

We venture to express the opinion that the introduction of these foods will supply a long felt want, especially in the tropical parts of the United States, on account of their good keeping qualities, portability, and ease of preparation. For scientific system of progressive infant feeding see page XIII.

Tumors of the breast appearing after the menopause are nearly always malignant.—*Ex.*

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Original Communications.

SURGICAL ECHOES FROM THE SURGICAL CONGRESS AT DUSSELDORF.

BY DR. J. J. BERRY.

(Translated from the German.)

PNEUMOTOMY FOR FOREIGN BODY, WITH- OUT SUPPURATION.

ARNOLDS, of Cologne, reported the case of a girl, who, while laughing, drew into the bronchial tubes a portion of a set of teeth. Dyspnoea appeared at once, but after five days, subsided. The x-ray showed an opacity on a line with the seventh rib, five centimetres to the right of the median line. It was established by careful computation that the foreign body was located ten centimetres posterior to the rib and hence must lie in the third bifurcation of the bronchus. To reach the same from above was impossible and a cure by natural methods improbable. On the contrary, it would most likely produce in course of time severe and dangerous symptoms. Hoffmann's statistics give fifty-five cases with thirty-one deaths, or a mortality of 80 per cent. As regards pneumotomy, Quincke and Freyhem have adduced discouraging figures. Out of the whole ten cases, there were four deaths and but two cures. After suppuration has occurred the results are uniformly bad. In this case pneumotomy was undertaken two months after the accident. An incision fifteen cm. long was made, extending from the fourth rib downwards and five cm. from the median line, followed by resection of the ribs from the sixth to the ninth.

The wound was packed and on the twelfth day a chloride of lime paste was applied. Up to the fourth day,

there was severe pain and the temperature ran up to 39.2°. After a few days, however, it subsided. The chief part of the operation was now attempted. By exploration with the needle the foreign body was finally detected, but upon cutting down upon it with a Pacquelin it disappeared. On account of the profuse hemorrhage which followed, the operation was discontinued. After a few days the patient was again placed upon a well-lighted operating-table, but it was again necessary to cut short the operation on account of hemorrhage. Four hours after they were expectorated by mouth. The patient still has a lung fistula, but is otherwise well.

NECROSIS OF THE PANCREAS.

Morian reported a case in which the physical signs pointed so strongly to cholelithiasis that he operated upon it. On the presenting coils of intestine there were observed small yellow nodules; hence he supposed that he had to do with a case of tuberculosis of the peritoneum. The swollen gall-bladder was opened and its contents composed of sero-pus and many gall-stones were evacuated. The general septic condition, however, continued and on the fourth day a swelling appeared under the ensiform cartilage. Exploratory puncture with negative results. On the fifth day there was a sudden discharge of coffee-ground material, milk and air from the gall-bladder fistula. This indicated a perforation of the stomach. Four weeks from date of attack, death ensued. Autopsy disclosed necrosis of the pancreas and a retro-peritoneal abscess reaching as far down as the psoas. The correct diagnosis of necrosis of this organ has been made but seven times though there is one case, as a complication of diabetes, still living.

CONGENITAL MALIGNANT GROWTHS IN CHILDREN.

Furst, of Berlin, reported the results of his past years' observations upon growths occurring in children up to the age of 14 years. Up to the present time, the reporter had tabulated 537 cases and made special investigations regarding their origin. Of these, 271 were connected with the urinary organs, usually the kidneys, there being here 109 instances of primary sarcoma, 86 of primary carcinoma and 8 of adenoma. Of renal cysts there were 24 and of congenital hydronephrosis also 24 instances. Sarcoma of the supra-renal capsules had been noted three times and malignant growths of the bladder 8 times. As regards the digestive organs, he had been able to collect 41 cases. Also 29 of the glands and lymphatics and 20 of the skin, bones, muscles and fascia. The sexual organs of both sexes were the seat of tumors in 94 cases, while there were 2 associated with the nerves and 67 with the eye. Several instances of malignant degeneration of originally benign growths were also noted.

OPERATIVE TREATMENT OF JACKSONIAN EPILEPSY.

Shede lays special stress upon the fact that operations should not be performed in such cases simply because there are cicatrices or depressions, but that complete recovery is probable only when all the symptoms of true Jacksonian epilepsy are present. To the already published cases of von Bergmann might be added three of his own in which in spite of their evident traumatic origin the operative treatment was a failure. In all of these the typical symptoms referred to were absent. It is known, however, that these traumatic attacks under certain conditions disappear either spontaneously or under medical treatment. If we can consider these operative cases cured after a trial of from three to five years, even then we can claim as cures only seven according to Braun, or eight according to Graf. To these three cases of Shede's may be added. The latter surgeon reports a fourth in an 18-year-old man with a complicated fracture of two years' stand-

ing, and who had from twenty to thirty attacks daily. Here the *dura mater* was removed. Afterwards there were from one to two attacks each day. At a second operation the motor center was examined with the platinum electrode, but it was found quite outside of the diseased tissue, and hence was not excised.

THE MECHANICAL TREATMENT OF ATONIC UTERINE HEMORRHAGE.

This condition depends in most cases, not upon the shortcomings of the physician, but upon causes which it is impossible to remove or to influence.

Cases of death from atonic hemorrhage after abortion are very seldom observed, most of them being *post partum*. Unfortunately, the statistics outside of the hospitals are very unreliable, deaths being often ascribed to "heart failure" and the like. Duhrssen believes that in Prussia one person dies each day from this one condition. Hence it is important that some method be made available which can be put in practice by both physician and midwife. Duhrssen's tamponade of the uterus has retained its popularity in spite of opposition, but it requires aseptic conditions, which are not always attainable. Hence Arndt has suggested the following procedure. Grasp the relaxed cervix with one or two pairs of bullet forceps and draw the uterus slowly and forcibly downwards. This, when done three or four times, will produce and establish uterine contractions. That this procedure will accomplish the desired result is recognized by the gynecologist, who is enabled to split the uterus longitudinally without much loss of blood when it is drawn down in this way.

The total extirpation of the gravid uterus for malignant disease as practiced by Winter, Duhrssen and Hegar shows that the same procedure can be safely performed in advanced stages of pregnancy also, and that traction markedly diminishes the flow of blood. Not only does it do this, but it also incites uterine contractions and a recurrence of the relaxed condition in question. These effects are attributable to the strong stimulation exerted upon the uterine

tissue, the automatic ganglion cells of the middle layer, and upon the nerves of the broad ligaments. That such cells really do exist is proven by the fact that a uterus cut off from the cerebro-spinal centers undergoes intermittent contractions after delivery. According to Spiegelberg a still greater stimulus is given by the anemia which follows the downward traction. Not only are the results of this method to be relied upon, but it is a procedure which can be cut by one possessing little technical knowledge. Hence its great value.

ABDOMINAL SECTION FOR MYOMATA.

The chief topic of discussion in this paper was the treatment of the pedicle, though the popularity of the vaginal method has lately rendered the consideration of this question unnecessary. Of the three principal operations—abdominal extirpation, supra-vaginal amputation with intraperitoneal treatment of the pedicle, and the extraperitoneal of the latter, which at the present time has been almost wholly discarded. The intraperitoneal method, which originally was carried out after Schroeder's method, is now modified by Leocifel who employs a continuous suture of the pedicle. Hofmeier has given up the suturing of the cervical stump. He ligates the isolated uterine arteries only, and then covers the cervix with peritoneum. The same procedure, under the term retro-peritoneal treatment of the stump, has been practiced successfully by Chrobak. The total extirpation from above is more difficult and undoubtedly gives worse results. The chief points to be remembered in practicing the retro-peritoneal method are: Removal of as much of the uterus as possible, in order that the stump may be small; isolation and ligation of the arteries and careful covering of the cervix with peritoneum. Hofmeier disinfects the cervical canal thoroughly before the operation, while others, as Olshausen, who do not attempt it, have equally good results.

By German operators are furnished a large number of cases—338 operations of the latter class, with 12 deaths; of which Olshausen reports

100 cases, with 6 deaths; and Hofmeier 57 cases, with one fatal result. American surgeons have contributed 347 cases with 17 deaths, making in all 685 cases, of which 29, or 4 per cent., have died.

KRYOFINE: A CLINICAL STUDY OF ITS PHYSIOLOGIC AND THERAPEUTIC ACTIONS.

BY G. A. GILBERT, M. D.,
DANBURY, CONN.

AMONG innumerable "Original Articles," "Original Communications," etc., published *ad gustum* in the American medical journals of the day, one of the favorite subjects treated is "The Abuse of Antipyretics," in discussing which the author seldom fails to accomplish the object so ingenuously announced in his title. He assumes that a disease should never be treated symptomatically; that the remedy is worthless, inasmuch as it modifies only the elevation of temperature, masks the real condition of affairs, and suffers the cause of the trouble to remain undisturbed. This is partially true; nevertheless, as a beneficent agent, temperately and wisely administered, the modern antipyretic is one of the most important discoveries of the present generation; a discovery, withal, that opens up to earnest investigators a vista of magnificent possibilities.

Of the sciences, that of medicine must now be recognized one of the most rapidly progressive of the age; and the general practitioner, though he may very properly refrain from rushing too eagerly to the front, should not allow his conservatism to degenerate into inertia, else he may find himself trailing along ignominiously in the rear. It is true that antipyretics have been used indiscriminately by careless members of the profession; but as a criticism this should have little weight, for in the same hands the same objection must obtain against the use of any other efficient remedy. A far more serious business is that of the druggists throughout the land dispensing and selling promiscuously to the public at large maximum doses of a certain

antipyretic (usually acetanilid), in the form and guise of "Headache Wafers," a pernicious practice that may be abolished only through concerted action on the part of live physicians in each and every community.

The one argument raised against this class of drugs that merits careful consideration, has reference to their untoward physiologic action; i. e., reducing abnormal temperatures either through rapid and extensive increase of heat radiation, or by direct chemical changes of the red corpuscles of the blood, thus rendering their administration dangerous in cases of extreme debility or of weak heart action. Obviously a defect of such vital character is remediable only in the laboratory of the chemist, whence the matter was long since referred, and though not until recently were results very satisfactory, yet gradual improvement had been made, phenacetine being less objectionable than either antipyrine or acetanilid; but even so minor a point as this was gained at the expense of certainty of action. The necessity for further investigation was therefore recognized, and has resulted in the appearance of kryofine.

On observing the statements of Dr. Back and Prof. Eichhorst, of the University of Zurich, that this last named drug produced "increase in blood pressure in harmony with a fall in temperature," that it "effected a very prolonged relief from pain;" and that "in influenza, the subjective symptoms were ameliorated" with "complete absence of unpleasant collateral effects"—the writer of this article speedily secured sufficient samples of the new remedy to test its efficacy during the present epidemic. It is an odorless, crystalline powder; has, in large doses, a faint, pungent taste; is three times more soluble than phenacetine, which, in chemical composition it closely resembles, both being derivatives of the aromatic base, para-phenetidin, $C_6H_4(NH_2)OC_2H_5$, of the familiar amido-phenol group: kryofine, a methoxy-acetyl derivative; phenacetine, simply an acetyl derivative. The dose of the former in powder, capsule or tablet, is 4 to 7½ grains, three or four times daily, although strict conformity to any arbitrary

posological standard is, of course, not necessary.

PHYSIOLOGIC ACTION.

1. *Antithermic properties.*—Though kryofine, in small doses, has no appreciable effect on the normal temperature of the human body, it does prevent the rise that ordinarily accompanies increased oxidation. This fact was observed in my own experience as follows. It has long been a nightly practice with me to engage in muscular exercise for twenty minutes or more, swinging Indian clubs, etc., until a rise of temperature occurred of at least a degree and a half, with an average increase of ten in the number of pulse beats. Eight grains of kryofine, divided in two equal doses, taken at an interval of fifteen minutes shortly before beginning the exercise, not only checked the looked-for rise in temperature, but prevented to a considerable degree the usual increased cutaneous secretions. The strength of the pulse was slightly augmented, but its frequency was unaltered, while no subjective symptoms whatever were recognized—except that the sensorium was quieted.

For the plus and minus signs observed here there can be but one rational explanation, and taken in conjunction with the fact that the manometer measures increased blood-pressure (25 mm.) coincidently with a fall of abnormal temperature, a clear case is at once established. By direct stimulation of the thermotaxic and vaso-motor centers, residing side by side in the upper region of the medulla—the former, by its inhibitory action, lessens the production of heat; while the latter, by constricting the arterioles, causes some increase in blood-pressure. It will be seen, that unlike the older antipyretics, kryofine does not insure apyrexia by simply increasing heat dissipation from the surface: nor does it, like certain of the modern antipyretics, slacken undue combustion by lessening or destroying the oxygen-carrying capacity of the blood; i. e., the change in red corpuscles from oxyhemoglobin to methemoglobin, with its commonly resultant cyanosis, does not and cannot in this instance take place. Further-

more Prof. Tromsdorff of Göttingen, has conclusively shown by spectroscopic analysis that the methemoglobin line is absent, and that oxyhemoglobin is unchanged. At the same time the urine shows that the increased nitrogenous metabolism accompanying the fever is much diminished, especially in elimination of urea. It is evident, therefore, that kryofine reduces hyperpyrexia by direct stimulus of the inhibitory heat center, the function of which is to repress the chemical changes in the constituents of the body through which heat is produced, thereby ultimately preventing that increased destruction of tissue, which is the result of fever.

2. *Analgesic properties.*—Owing, as already seen, to its direct influence on the vaso-motor center of the sympathetic system, kryofine becomes a powerful nervinum; and, being more rapidly absorbed than other drugs of its class, its effect is proportionately more prompt. In some instances when administered for relief of pain, euphoria is said to have resulted within fifteen minutes. Prof. Butler, of Illinois University, believes that "with the exception of morphine, no other drug possesses so positive, prompt and efficient an analgesic property." Its calmative effect on the nervous system led to its employment by Prof. Eichhorst in cases of intense neuralgic pains, where the other coal-tar derivatives had failed to give relief, from which he reports the most gratifying results. The *modus operandi* of its analgesic influence is doubtless similar to its action as a febrifuge; i. e., lessening or preventing subjective pains that are caused by precisely the same *materies morbi* in the system as induced the accompanying abnormal temperature. Especially is this true in diseases like rheumatism and influenza, where dampness or cold, or some other imponderable agent, produces an impression on the skin, or mucous surfaces of the body, which is almost immediately conducted to the vaso-motor and trophic centers by the afferent nerves.

In summing up, therefore, the physiologic action of the new remedy, it will be observed that though it lessens or prevents the over-produc-

tion of internal heat, it has, in therapeutic doses, practically no effect on normal temperature; likewise, that though it lessens or prevents the production of internal pain, it has no effect on normal sensation—the appreciation of tactile impressions being in nowise disturbed. Its influence, then, is exerted solely in restraint of the abnormal; as an ally or stimulus of two of the vital nervous functions it renders inert or destroys the morbid agency that is responsible for fever and pain. Should increased oxidation be due in any case to the aerobic bacteria, it will be remembered that the latter are easily overcome by phenol solution externally; and by certain chemists it is now believed not improbable that the same beneficent effect may be produced internally.

THERAPEUTIC ACTION.

From its effect in aborting catabolism and controlling subjective pain the administration of kryofine would seem to be especially indicated in influenza, more particularly those cases in which the nervous symptoms are pronounced. Then, too, in influenza the greatly increased nitrogenous metabolism (caused by interruption of the thermogenic mechanism), being in excess of its usual proportion to the amount of fever, is, of course, beyond the control of the ordinary antipyretics, but, as already pointed out, is specifically controlled by the action of kryofine; and thus does it serve to prevent that extreme muscular weakness and neurasthenia, so commonly concomitants or resultants of this disease. The salutary effect of the drug in this respect, together with the absence of unpleasant phenomena following its use, will perhaps be made more manifest as studied in the subjoined clinical cases:

CASE 1. Grace W., æt. 15, has suffered since early childhood from valvular lesion (mitral regurgitation) of the heart; has been treated by me during the past three years for the resultant headache—with occasional dyspnoea and vertigo; great dilatation and hypertrophy of the heart evidenced by an exceedingly prominent precordium, with marked undulatory pulsation over its entire area; the remarkable distension of the chest

wall, as well as the cardiac murmur, impresses the most casual observer; she is undersized and anæmic; pulse usually obliterated on slight pressure. Four grains, either of acetanilid or phenacetine, repeated at intervals of four hours, though giving some relief to the headache, will invariably, after third dose, produce cyanosis of the face and neck and considerable prostration. The ordinary remedies afforded no relief. On New Year's day, patient attacked with influenza. During the subsequent week no relief was obtained for a severe cephalalgia and cough, notwithstanding various remedies were used,—including chlorodyne, antikamnia and codeia, brandy, etc.: cough due, however, to laryngo-tracheal irritation, rather than to any catarrhal inflammation of the bronchi.

Status on Jan. 8.—Headache and cough predominant: frontal pains of neuralgic type; cough, dry and unproductive, practically incessant, especially at night—resulting in almost total loss of sleep; muscular and cardiac weakness, nervousness and depression also prominent. At this point prescribed kryofine tablets (gr. iv) three times daily, with the following exquisite results: Headache was lessened after first dose, and allayed at end of the first day. Cough somewhat ameliorated the first day, remaining thus without further improvement until beginning of the third. Combined heroin (gr. $\frac{1}{16}$) with kryofine on this latter date, whereupon cough gradually diminished and disappeared on Jan. 12. Patient attended school Jan. 16. Careful observation failed to detect the slightest ill effect of the new remedy upon the action of the heart; which, in this instance, was so abnormally sensitive.

CASE II. Mrs. G., æt. 50, highly nervous temperament, delicate constitution and physique, attacked with influenza Jan. 2, presenting the following symptoms: viz., myalgia, cephalalgia, fever and cough. A temperature of $102\frac{1}{2}$ was readily reduced by phenacetine; but, with this exception, the symptoms persisted in the face of a routine treatment throughout the succeeding five days.

Status on Jan. 8.—Legache, backache, headache, partial hysteria,

muscular weakness and cough. Cough, laryngeal; largely neurotic; utterly fruitless; worse at night and upon rising in the morning. General bodily pains very severe, without intermission, and resisting obstinately the action of every anodyne administered—opium, in any form, being contra-indicated; weakness pronounced, with signs of prostration. At this stage prescribed kryofine tablets (gr. viiss) to be taken four times daily, at intervals of four hours, until relieved. Euphoria resulted within ten minutes after the second dose; and, excepting the cough, all symptoms were alleviated at the end of first day. On the morning of Jan. 10th, combined heroin (gr. $\frac{1}{16}$) with the kryofine; from the time of the administration of which, the cough gradually abated—disappearing before the end of third day.

The writer has obtained uniformly satisfactory results in seven more recent cases of influenza, in which kryofine was prescribed from the beginning. Four of them were attended with high fever, which was speedily assuaged at the very outset. The most striking effect observed, however, was the almost instantaneous and prolonged relief from the neuralgic pains so prevalent in these cases; then, too, what is of supreme importance, a threatened neurasthenia was apparently aborted in at least three separate instances. Thus, it would seem, from a careful study of its physiologic and therapeutic actions, that of the modern antipyretic and antineuralgic remedies, kryofine bids fair to become the most valuable yet discovered. Dr. Bischler, of Zurich, the eminent physiologist and chemist from whose skillful and tireless investigations kryofine has been produced, assumed *a priori* that it would possess similar but stronger therapeutic properties than analogous drugs, owing to the fact of its being a more highly alkylated body or substance and much more readily saponified than they by means of hydrochloric acid and also by a solution of caustic potash. The well-known fact that the acid gastric juice, as well as the alkali of the duodenum, acts on such substances within the body as a saponifier, would indicate that his assumption was not ill-grounded.

It had previously been shown by the experiments of Hinsberg and Treupel, [*Cf. Archiv. für experimentelle Pathologie und Pharmakologie*, Bd. xxxiii, S. 216] that the distinctive physiologic action of the amido-phenols, increased in approximate proportion to the splitting off within the organism of their several component chemical groups. Dr. Friedrich Müller had also demonstrated that the splitting off of the acetyl group, and the further partial breaking off of the ethyl group from the p-amido-phenol, in the case of phenacetine, gave to that drug its respective antithermic and analgesic properties. Therefore, on account of its greater molecular instability and its more ready saponification, it was at once seen that kryofine would not only divide as above, but that its methoxy-acetyl group must still further subdivide and give off the methyl group; which would, of course, (in conjunction with the ethyl derivative) enhance its antineuralgic action manifold. Quantitative analyses—for the purpose of detecting the amount of the probable increase of the ethyl sulphuric acids in the urine of kryofine subjects—have consequently been made, and such considerable increase has been actually demonstrated. From the standpoint of the chemist, therefore, the new remedy must necessarily prove therapeutically more energetic than any of its older rivals; and it has been shown, thus far, from the experience of the clinician, that such a claim has many points in favor of its ultimate substantiation.

A New York oculist is reported in a scientific journal as saying "that Americans are too reckless of their eyes in exposing them to the electric light rays, and if a reform is not had, a sightless race may be developed." "The proper thing to do," he adds, "is to abolish electric lamps altogether, and substitute fluorescent tubes, which cost no more and give a steady light." It is said that arrangements are being made to light an entire block in New York by fluorescent tubes.—*The Medical Times*.

A FEW HINTS TO THE GENERAL PRACTITIONER ON THE TREATMENT OF CHILDREN WHO ARE ANÆMIC.

BY O. J. SHORT, M. D.,
HOT SPRINGS, ARK.

THE SUBJECT which I will try to briefly cover is a very large one, and I feel that it has been imperfectly presented. But, if I have succeeded in calling attention to any features which may have been forgotten by some, I shall be more than satisfied.

I shall exclude in this paper considerations which apply to acute inflammatory diseases, the object being to deal principally and generally with chronic troubles, their manifestations, mode of treatment and the best medicaments.

When a patient is presented to me for treatment, whether it be in my office or at the bedside or in the consultation room, my thought is to take in at the first glance the condition of the nutrition of the child. Is it anæmic? This question answered in the affirmative by me, I then proceed to discover its cause.

Let's take as an example the case of a child eight years of age, whose mother presents her to you, saying that her little girl is not growing as rapidly as she ought to do, and that she has no appetite, sleeps with her mouth open, snores in her sleep, and that she often has sore throat. This picture is not overdrawn. You seat the little child in your chair, and with head mirror in place, and tongue depressor in hand, are ready to look in her throat. Is it necessary for me to say why? Just look at the child. She is pale and terribly anæmic. Her little body is far below the normal vital plane. This you have in mind. Now, let us look in the throat—yes there they are in the pharynx, one on each side, and a cluster behind the uvula. The tonsillotome cleans off both sides, the curette scrapes out the post-nasal space. The throat is clear. Now, shall we dismiss this child with a prescription calling for iron or cod liver oil? I answer positively and emphatically, no,—and yet this was the old way.

Another case, that of a little boy, is presented. He has a piece of cotton stuck in his ear. The same picture of malnutrition is before you. No blood, pale and anæmic, easily catching cold, and the history of a running ear which had existed for two years. Of course he had been treated by his family physician with iron and cod liver oil—and the ear had been washed out with a solution of boric acid and dried, and boric acid had been blown in the ear, but it was not any better, and, let me say, never would get better till the treatment was directed to building up the blood of the child, and looking after his nutrition generally. Cod liver oil and iron simply are contra-indicated, for, if the little feeble furnace cannot burn up and appropriate foods which are easy of digestion,—it is simply taxing the vital force to continue such medication. I do not for one moment accept the statement made that the removal of the mechanical obstruction will bring about a cure. These statements are made by operators—and not by therapeutists and, in my opinion, it is bad advice to give to the general practitioner.

"Cod liver oil, it should be remembered, has no place in the treatment of malnutrition, because it leads to fat intoxication and thus prevents nutrition." (Norbury.)

Among others which I shall dwell upon as to their constitutional treatment, are certain diseases of the eye, and, as a first instance, mention one we often see as the result of malnutrition either hereditary or acquired, namely:

Interstitial keratitis, in which the substantia propria is the part of the cornea primarily involved. The posterior layers including the endothelium, are often implicated, but there is no impairment of the epithelium except that in some cases it has a dull, finely molecular appearance like the surface of a ground glass. How about the nutrition of the patient? Pale, anæmic, bloodless. The child is very delicate, with most feeble digestion: or the condition presented is, conjunctivitis phlyctænulosa, characterized by the appearance of one or more bladder-like vesicular elevations in the conjunctiva, usually near the corneal margin, though they may

occur at any point on the ocular conjunctiva, the conjunctiva in the neighborhood being injected and infiltrated from the corneal margin, as far as the cul-de-sac. There is usually some catarrhal conjunctivitis present in these cases with the usual symptoms of injection and a mucous discharge.

Is the nutrition of the patient at fault? Oh yes—red blood corpuscles are below the normal and hæmoglobin is deficient. Another frequent malady is inflammation of the tissue of the iris,—iritis; especially those cases dependent upon a constitutional cause. The symptoms are, swelling and discoloration of the iris, a more or less immovable pupil, adhesions of the posterior surface of the iris to the anterior capsule, irregularity of the pupil, ciliary injection of the eye-ball, diminution of vision, and pain. I shall not consider local treatment. Is the little patient anæmic? Yes, there is deplorable anæmia. There is an inherited taint.

The citation of these few cases suffices. There is no necessity for recapitulation. They come into the office every day.

The effort of this paper shall be to direct the attention of the profession to an extensive experience in treating these cases by tonic-alteratives and to point, out as far as possible, my reasons why.

Numerous fashionable medications could be mentioned and theoretically suggested, but I am dealing now solely and entirely with facts based upon a ripe experience.

Hot Springs, Arkansas, furnishes to the specialist and general practitioner, a field for most extensive data in the treatment of diseases, where the local manifestations are secondary as to management. Men, women and children come here whose blood-making apparatus is about as depraved as it is possible to picture and, no matter how the local treatment is to be directed, invariably my most earnest attention is toward their nutrition and the building up of their nervous systems. I shall never forget the advice of my teacher, the renowned Professor of Physiology, (the noted) Geddings, of Georgia. He it was who instilled into the student's mind the thought "*look after the nu-*

trition of the patient, and strengthen the nervous system in disease."

It was my habit, formerly, to prescribe tonics such as iron and cod liver oil in the class of diseases I have mentioned, but a more extended experience has directed my thought toward the tonic alteratives. For the last several years, I have used the liq. bromide of gold and arsenic—arsenauro, very extensively in the treatment of interstitial keratitis. It is now my only constitutional treatment in the cases above referred to.

I find it much better than the syrup iodide of iron, owing to the fact that it is better borne by the stomach in these delicate children. I gradually grew into the habit of prescribing, when their digestion failed from too free use of the iodides. Moreover it does not produce congestion of the conjunctiva as do the iodides. The puffiness of the eyelids sometimes produced by large doses of arsenauero aggravates no diseases of the eyes, which is a great drawback to the iodides and most alteratives and is a great point in favor of arsenauero.

I give the liq. bromide of gold, arsenic and mercury,—mercauro, in phlyctenular conjunctivitis for the very same reason. It not only is the best of all blood-builders, easily taken by children, but (like arsenauero) it does not produce congestion of the conjunctiva, as do the iodides.

I have also found it most valuable in the treatment of conjunctivitis oedematous. This troublesome affection is prone to repeated recurrence and patients are often frightened by being told that it is scrofula. Noyes most beautifully describes it in his second edition, p. 313. It is not dangerous, often gets well in a few days without any treatment, but its frequency of recurrence is very distressing. The general nervous apparatus is at fault. I have notes of several cases treated with mercauro, of two years' standing, with no recurrence.

Mercauro will be found to be a most valuable adjuvant in iritis, where heroic doses of mercury are used.

In all optic nerve troubles it is my custom now to prescribe arsenauero in twenty drop doses before meals, in a half glass of water and kali iodide beginning with ten or fifteen gr.

doses in water or milk, one-half hour after meals and increasing to tolerance.

For several years previously I had been in the habit of giving liq. pot. arsenitis, in conjunction with the iodides, but of late have preferred arsenauero and mercauro for the reasons mentioned.

Children bear these solutions splendidly and, as their stomachs are usually in a state of atony, in these diseases and absorption of foods very poor, I use these solutions both for the tonic local effect on the gastric mucous membrane, as well as for their powerful blood-building qualities.

A child of 8 or 10 years of age can easily take eight or ten drops, three times a day, for three or four months, and the result obtained is in excess of that to be secured from all other tonic treatment.

Associated with the diseases, I have mentioned, is often the history of syphilis on the part of one or both parents, and we have many other points of diagnosis which are peculiar to and emphasize this heredity, and it will be found that these gold solutions act most happily by neutralizing the poison.

These scientific facts can be demonstrated and proved unquestionably true.

Surrounding us, upon the broad plains of therapeutics, lies an unknown wealth of hidden health, and, beneath the magical touch of the skilled chemist and learned physician, from the dross and sands of nature, the golden stream pours upon the pathway to success, and we see written across the broad expanse of futurity, this inscription, in increasing brilliancy, learn therapeutics and materia medica.

SUCCESS OF METHYL BLUE IN ALBUMINURIA.—Lemoine describes the remarkable benefit he derived from methyl blue in seven cases of albuminuria in Bright's disease (*Nord. Med.*). It is soon eliminated through the kidneys without inconvenience, except possibly in some cases a slight smarting during micturition, which can be prevented by adding a little nutmeg; 0.20 to 0.50 centigrams in 24 hours are sufficient.—*Ex.*

MODERN TREATMENT OF
HEMORRHOIDS.BY DR. R. TIMMERMANN,
HANOVER.

VALUABLE progress has been made in recent years in the local therapeutic treatment of hemorrhoids. Hitherto, the practitioner had found himself in an uncomfortable position regarding these troubles, not only in the treatment of newly-formed hemorrhoids, but in chronic cases more or less developed, even up to large venous knots hanging from the rectum; in reality, he had no remedies at all at his disposal to satisfy the expectations of the patient, which constitute an early and lasting ceasing of the pain and an ultimate disappearance of the disease.

We may prescribe a strict diet, bodily exercise, cold or lukewarm sitz-baths and massage, we can administer laxatives and suppositories containing narcotics, etc., but all these give only temporary relief, or in the case of narcotics, a quickly-passing stupefying effect, following which the pains are more severe. Besides, all these precautions are not always carried out by the patient with the necessary perseverance, especially seeing that hemorrhoids appear more frequently in that class of people who have always been accustomed to good living and cannot readily adapt themselves to a simple diet and mode of life.

Moreover, all these precautions cannot be carried out in practical life, however willing the patient may be, in persons whose occupation compels a sedentary mode of life, and who suffer from plethora of the abdominal organs, as it would necessitate neglecting their business.

In cases of hemorrhoids of the size of a pea, walnut, or more, the spontaneous bleeding of which brings temporary relief, the medical attendant can, with good reason, get rid of the patient by telling him that such swellings can only be removed by extirpation, for which operation a surgeon must be consulted.

If the patient follows this advice, a great service is not done the surgeon by asking him to perform an operation, because hemorrhoidal operations, owing to the uncertainty

of result and mode of performance are not very pleasant or satisfactory.

If, however, the patient, as is mostly the case, greatly fearing the knife, does not consult the surgeon, then the family physician has to put up with the complaints and reproaches of the patient, and at last, *nolens volens*, opium or belladonna preparations in increasing doses have to be resorted to as an ultimatum. In short, the medical man had no remedy which was capable of allaying the pain within a few hours and at the same time check from the moment of commencement of treatment the formation of new hemorrhoids, thereby affecting a cure. The practitioner, as well as the layman, will only be too pleased that a remedy introduced a short time ago has proved of such value as a therapeutic local remedy in such cases, that it can be described as a specific for hemorrhoids. This medicament is a combination of bismuth with iodo-resorcin sulfonic acid, and which, owing to its specific effect upon the mucous membrane of the rectum in various conditions, is briefly called *anisol*.

Its effect is manifold; it acts upon suppurating, secreting, or moist surfaces, drying up and limiting the secretion; it is a very powerful disinfectant and deodorant, as well as an astringent, these properties explaining the strong action of *anisol* in causing granulation and consequent healing of sore parts; and, furthermore, *anisol* acts in a most suitable manner, when combined with other substances, in the treatment of hemorrhoids, as it relieves constipation and removes any hardened feces, causing a slippery, pappy and painless stool. The combined action of these various properties is the cause of the great success of *anisol* in the treatment of hemorrhoids—as has been reported by numberless patients—even in most severe cases of many years' standing. This success will induce practitioners, when treating hemorrhoids, to adopt a much simpler and satisfactory method than hitherto. Previously the physician tried to remove the originating cause of the disease by regulating the diet, by advising a suitable mode of living, and by creating a more active circulation of the blood, more especially

in the abdominal organs. Often we succeeded—although only partly, sometimes even after weeks or months—in removing the unpleasant symptoms; but even in such cases we frequently had the sad experience that, owing to some little deviation from instructions, although probably done quite unintentionally, the old pains suddenly recurred in a much more severe form. On the other hand, the exact following out of instructions and the employment of internal and local remedies had no effect whatever. The method now adopted is a different one: we still attach much importance to our instructions being carried out regarding the general mode of living, diet, etc.; but the experience of many years has taught us that success largely depends upon our efforts in treating the local symptoms, disturbing the ordinary mode of life of the patient as little as possible. This local treatment is an extremely simple one, and consists in the employment of anosol suppositories.

The iodo-resorcin sulfonate of bismuth (anosol), which is absolutely non-toxic, and when not incorporated with a fatty basis is readily decomposed when exposed to air and light, is made into suppositories in combination with zinc ox., as an adjuvant and cacao butter and ung. cereum as constituents, and is only supplied in the form of suppositories. The following has proved to be the best formula:

℞ Anusoli, gr. 112.
Zinci ox., gr. 90.
Balsam Peru, gr. 22½.
Cacao butter, 35.
Ungt. cerei, gr. 40.

M. Ft. suppositoria, No. 12.

One suppository should be inserted into the rectum, above the sphincter, each evening, or in chronic cases morning and evening. If the hemorrhoids are external, a portion of the suppository should be well rubbed into the parts; and the remainder of the suppository introduced into the rectum. If the bowels are moved within half an hour after the introduction, the effect is somewhat nullified, and hence another suppository should be introduced. Although the suppositories do not contain any narcotic, the pain is greatly relieved,

even after the first suppository; and after prolonged use (one or two dozen suppositories) in almost every case the whole of the troublesome symptoms had disappeared. Of course, the treatment is assisted by keeping to a simple and suitable diet, avoiding stimulating foods (strong coffee, alcohol, etc.) and sitting on damp or cold places, without, however, incommoding the patient by any radical changes in his diet or mode of life.

The most important point is the local treatment. Should there be at any time the slightest sign of recurrence, then the immediate employment of the suppositories will be found, in most cases, to absolutely remove the disease.

When we consider that women when pregnant and after parturition are often troubled with hemorrhoids, constipation and painful evacuation of the bowels, and that anosol can be given to anybody under all conditions without the slightest ill-effect, this remedy must be considered of great and useful help to the medical man in the treatment of such affections. Anusol suppositories are valuable not only in the treatment of hemorrhoids, but have also been successfully employed in many other diseased conditions of the rectum, its mucous membrane and external surrounding skin, seeing that in cases of constipation, and all kinds of painful evacuations of the bowel, in intestinal tuberculosis, enlarged prostate, etc., a painless, pappy evacuation takes place. In fissure of the anus and catarrh of the mucous membrane of the rectum these suppositories often affect—as a result of the aforementioned therapeutic properties—a radical cure. Again, their action is very prompt in cases of oxyuris vermicularis in children and adults and in cases of painful pruritus vaginæ. In all cases of sores of the external skin, be it in infants or adults, in prurigo, intertrigo, etc., anosol, when rubbed into the affected part in suppository form, is a safe and never-failing remedy.

A great advantage of anosol suppositories is that they can be had ready-made for use, which saves the chemist the unpleasant task of making the suppositories and the medical

man the trouble of writing out a full prescription. He would simply have to prescribe as follows:

R. Supp. hemorrhoidale anusoli,
No. 12.

Sig. One every evening (in severe cases, morning and evening) to be inserted into the rectum; or, the sore part to be rubbed with the suppository three times a day.

Of the numerous favorable medical reports which have appeared on the subject, that of Dr. Altschul's on "The Etiology and Therapy of Hemorrhoids," read in the Aeztliche Verein, at Frankfort, November, 1896, and published in the *Deutsche Medicinal Zeitung*, November, 1897, should be mentioned.

Dr. Altschul, who has himself suffered from hemorrhoids for twenty years, and has in his own interest tested many methods of treatment on himself, says, at the end of his paper, after having explained the various dietetic methods of treatment (*loco citato*):—"Hantel pessaries, which have been recommended by others, have been prescribed by me in some cases, but no patient showed sufficient perseverance to wear them for any length of time; I will, therefore, not give a conclusive judgment upon them. A disadvantage which cannot be obviated with them is the removal of the flatus which is generated when they are worn. With these pessaries it is possible in medium cases, not to cure them, but to make life bearable and more comfortable. This I have personally experienced. Unfortunately during the spring I did not keep to the dietetic and other limits imposed, and the consequence was a re-appearance of the venous knots, with tenesmus and itching. I hoped to derive benefit by climbing whilst staying in the mountainous district; however, unfavorable weather did not allow me to carry out my intentions, and only on my return home could I again resume the usual restricted mode of living. The improvement was despairingly slow, when I casually heard of anusol suppositories. The first trial with four suppositories was without success, and it was with difficulty that I could be induced to make another trial. I ultimately, however, used them for four days—

two suppositories per day, and then for a further four days applying only one suppository per day. The result was completely successful. Since that time (two months ago) I have complete comfort, only after defecation having to replace—as I have done for years—the prolapsed anus. Upon this last occasion I had been troubled for four months, and attribute the satisfactory cure entirely to the anusol suppositories. Since then I have prescribed them for a large number of patients, and all found great relief of their troubles, although not to the extent that I did. It seems to have no effect upon hæmorrhage. The effective agent in the suppositories is a new chemical preparation called iodo-resorcin sulfonate of bismuth. I have never heard of any toxic or harmful by-effects."

This case is almost typical. On the one hand, we observe that no method has hitherto given the patient complete rest, and that the old pains recur immediately after the slightest irregularity in the mode of living or diet; on the other hand, we observe the most astounding success which followed the employment of these suppositories when used as prescribed, giving as they did complete rest and comfort for over two months.

We have in anusol a most valuable addition to our materia medica, which is a great help to the medical man, owing to the simplicity and safety of its employment, and will prove a blessing to the large number of people who are troubled with hemorrhoids.

FALSE LABOR PAINS—As soon as false labor pains are suspected a four-quart enema should be given at once and then a quarter of a grain of morphine hypodermatically. The morphine may be repeated by the mouth in an hour or two if the pain lessens but does not disappear. Nothing stops the pain so rapidly as an enema. Do not think of cathartics. They take too much time and may increase the irritation. In some cases it is impossible to stop the colic until after hot drinks, as ginger, peppermint, or inhalations of chloroform and even hot fomentations and flax-seed-meal poultices have been used. *Burns, Jour. Amer. Med. Asso.*

THE TRAINED NURSE.

BY DR. GEORGE A. WHEELER.,
CASTINE, ME.

DURING the past year many articles have appeared in various medical journals either criticising the nurse for her ignorance of some kind of work or for her alleged unwillingness to work outside of hospitals and the families of the wealthy, or else criticising the course of study and education of the trained nurse.

None of these papers that I have seen meet the wants of the small town or the country village. They have all been written from the standpoint of the city, if not the hospital, physician. For some time my mind has been occupied with this matter and I have been anxiously waiting for some one else to formulate a plan which would result in giving country physicians and their patients the benefit of better nurses than are now obtainable by them and at a price which though fairly commensurate with the services rendered would still be not excessively high, but would be within the ability of the majority of our patients to pay.

No physician of the present day wishes for, if it can be avoided, the services of some motherly old "granny" with her head full of superstitions and with fetiches to cure all kinds of illness, neither does he generally, if resident in a small town, altogether desire the services of the expensive, high-toned, professional nurse from the city. As a rule the latter class do not succeed very well in private nursing in the country. Practically, many of us do not believe in the advantage of the highly educated nurse outside of hospitals. Nursing is a *trade* and not a profession and any attempt to exalt it to the dignity of a profession is fraught with danger to the best interests of the physician, the patient and even the nurse herself. The regular hospital nurse is too apt to imagine herself the superior of the country doctor while at the same time her manner of caring for the sick and her relations with the family are apt to be somewhat unsatisfactory. Before considering the question of how to obtain better nurses for country

communities let us ask why we need special nurses, outside of the care willingly given by the family and friends and what we have a right to expect from such special attendants.

Nurses are needed to attend to the innumerable wants of the sick at times when the doctor is not present, to carry out faithfully the physician's directions and to report to him the condition of the patient during his absence. What the *patient* has a right to expect from the nurse, is:

1. A quiet, cheerful, sympathetic manner.
2. The ability to make up a bed in a proper manner. To lift a patient without hurting. To keep awake when necessary. To wash and otherwise attend to the toilet of her charge and to give food and medicine without slopping.
3. To prepare such food as the family cook may not know how to prepare.

What the *family* have a right to expect from the nurse, is:

1. That she give her whole time and attention to the patient, when it is needed, so far as her own health will justify.
2. That she do not turn up her nose at them because they eat with a knife instead of a silver fork or because they, in any way, trespass on her sensibilities.
3. That she be not above giving them any reasonable help in the family cares when the condition of the sick is such as to permit of her so doing.

What the *doctor* has a right to expect from the nurse, is:

1. That she shall attend to her business of nursing, faithfully obey his instructions and not undertake the medical treatment herself.
2. That she shall know how to count the pulse and respiration and to take the temperature.
3. That she shall be able to use a catheter.
4. That she shall know how to give an injection or an enema or to introduce a suppository.
5. That she shall know how to make and apply a cataplasm and to cut, roll up and apply evenly an ordinary simple bandage.
6. That she shall be able to make out a legible written report of the

condition of the patient between the doctor's visits.

Of course many other *desirable* qualifications might be mentioned, but any nurse possessing those just enumerated would prove a boon to country doctor and patient alike. Given the right material to start with, the necessary instruction could be given in one or two months instead of the year or two now required by the schools. A nurse needs but a very limited knowledge of anatomy and no greater knowledge of physiology than any other person ought to have. The less the nurse knows about the theories of disease the better. Her business is to know the patient. She should also be the right arm of the physician, but the arm should never assume or attempt to equal the head!

The plan had in view for the training of such a nurse as is needed in country homes, is that the schools for the education of nurses give a short course of from four to six weeks especially for country nurses. If this plan be not feasible it is further suggested that physicians in the same or adjoining towns give each two or three weeks instruction and then pass their pupils along to some other doctor. Physicians can well afford to give their time to this gratuitously as they will be well repaid later on. The first physician giving instruction to a candidate should give her a certificate enumerating her qualifications and this should be endorsed by each subsequent instructor. This certificate would serve the same purpose as a diploma from a school.

The plan outlined would probably be followed by success in very many localities. In my own field of practice ordinary nurses get about two to four dollars a week and trained nurses from the city get from ten to fifteen dollars and expenses. There is a scarcity of both kinds. I believe two or three nurses trained as suggested in this paper, could, in every community of one thousand souls, have constant employment at from three to seven dollars per week. If any better plan can be suggested the writer will be only too glad to have it made public.

FERALBOID: WHAT IT IS AND WHAT IT DOES.

BY W. H. BIRCHMORE, M. D.,
BROOKLYN, N. Y.

THIS substance may very properly be considered as an iron albuminate; that is, a union of the hypothetical albuminic acid of the organic chemistry, with iron oxide as a base. This being granted we have in hand a substance chemically the analogue of the hæmatoglobin of the blood. Analogous, but not quite isomeric.

From the nature of the manufacturing process the albumen has been cooked, and therefore is in the condition most favorable to rapid and easy digestion and absorption by the human or other animal body. Carefully conducted experiments made in this direction show that the iron in no way delays the digestion of the albuminoid portion, and the union is not disturbed by the re-arrangement of the particles during peptonization. In this respect it exactly coincides with the behavior of the red figured elements in the blood. If filtered, defibrinated blood is cooked in the same way as is this union of iron with albumen, a peptone presenting the same characteristics is obtained; this still further emphasizes the analogy.

While the ultimate analysis of the red blood bodies has been many times made, no one has yet satisfactorily ascertained the formula expressing the relations of the component proximates, nor has it been proved to a demonstration what these proximates are. Equally ultimate analysis fails to show the construction formula for feralboid, but from the percentage composition it is easily deduced that for an equal value of the carbon-nitrogen groups involved, feralboid must contain two molecules less of water and one atom more of iron than do the red blood corpuscles. The analogy between them is therefore very close, far closer, indeed, than the analogy between such cooked blood bodies and any other attempt to reproduce the conditions chemically involved.

THE PHYSIOLOGICAL RELATIONS

Of feralboid seem to be directly with the blood and the relations to

general nutrition secondary thereto. So short a time has elapsed since the first really successful attempt at manufacture that any very extended series of observations have been impossible, nevertheless it has been demonstrated both by superficial evidence and by minute investigations that under its systematic use, one-third grain three times daily for one month, an improvement almost miraculous takes place in anæmic cases. The objective evidence obtained by the examination of the blood is incontrovertible. Not only have the number of red blood bodies invariably increased after its use even for so limited a period as one week in cases (3) which had persistently resisted other forms of iron administered according to the rules of the art, but in a case where the number of colorless, so-called white, cells had increased beyond the limit of safety and difficult respiration had shown itself, a marked improvement appeared within ten days. The respiratory difficulty disappeared, and a long step towards the return to the normal relation of colorless to colored bodies had been accomplished.

THE THERAPEUTIC RELATIONS

May be inferred from what has just been said, but a certain amount of positive information has been obtained. In one case of quantitative anæmia accompanied by periodic neuralgia of many years' standing, the systematic use has obtained, in six weeks, a distinct amelioration both in the duration and intensity of the attacks. In a case of anæmic neurasthenia, accompanied by a tendency towards melancholia, this patient is a well-known portrait painter, an improvement has become very noticeable after one month's use.

THE PHYSICAL EVIDENCE OF ITS INFLUENCE

On the heart is obtainable by sphygmographic tracings. On strong, healthy men with a full, vigorous pulse the effect observed is an increase in *excursus pulsus* without demonstrable change in the rate, but in cases of weakened and debilitated organs the result is first to increase the rapidity of the beat. This acceleration, which is generally manifest within a very

few minutes, is usually followed in a short time by distinct increase in the *excursus* and a diminution in the number of beats as compared with the respiration rate. This is not due to an increase in the respiration rate, as might be inferred, but to the actually slower contraction of the heart. This, in one instance, was accompanied by a decrease in the number of respirations from 23 to 18. The effects are not transient, but will last for hours. If the doses are given with a knowledge of the duration of the effect on the individual the results may be made *quasi* permanent.

EFFECTS ON TISSUE METABOLISM.

Experiments lasting through a period of five days, 123 hours, on a man of ordinary activity whose body habits are well known, having been the subject of minute expert study for years, showed that without any change in his ordinary habits, or in diet, beyond the taking of one and one-half grains of feralboid with each meal, a diminution of the amount of uric acid excreted and an increase in the amount of urea. This person has a habit of excessive uric acid excretion and the diminution was marked. The free uric acid was decreased nearly 20 per cent. (18.2) This result is very remarkable; and as satisfactory as remarkable, for while there was rather more than corresponding increase in the amount of urea, the relations of the other ingredients were unchanged. If the assumption so generally accepted be held as a proven fact that the formation of uric acid vice urea is due to an insufficient oxygen supply to the tissues from qualitative or quantitative blood deficiency, the conclusion is inevitable that this deficiency is supplied by feralboid.

The great amount of time expended in attempts to produce a compound meeting these needs does not seem to have been wasted, and the manufacture being in the hands of experts, one may be reasonably certain that an article in every way superior to the ordinary trade preparations will result.

It supplies not only a long-felt want, of these there is an endless multitude, but a real need, and one

which has at some time appealed most strongly to every practitioner.

It is inevitable that an opposite side should be assumed; it will naturally be urged that continual use for a long period will produce dangerous susceptibility to the possible reaction from the stimulant effect; granted, but the reaction cannot be proved to occur, nor can any reason be shown why it should, unless we consider hunger as the reaction from eating a dinner. Feralboid is food, food of a special sort, indeed; but it is as absolutely needful that the iron ration in the food be ample as it is that beef supplies shall not be found wanting. Without sufficient iron the blood will most surely be impoverished, with sufficient iron the tissue metabolism of the body will go on normally, and this so needed sufficiency is easily, pleasantly, purely and without fail assured by the proper use of feralboid.

THE THEORY OF ITS EFFECTS.

It is absolutely impossible as yet, from lack of experimental data, to predicate any method by which the observed results can be directly accounted for, but it is by no means beyond our knowledge to form and within measure to establish a definite proposition. We may assume, therefore, as a working hypothesis, one of a number of possible theories.

The absorption of the peptonized albuminate with other peptones, after the complete digestion, by the ordinary channels and the increment in the circulation by diffusion of the dissolved iron, with its proper absorption by all the tissues by their faculty of selection. Those tissues which give origin to the red blood cells, taking up the larger proportion and developing more rapidly and more numerous into the normal healthy form with the accompanying exercise of the normal health functions. Or, second, we may assume the selection and absorption by erythrocytes, irrespective of the rest of the tissues; or we assume (third) the selection and appropriation of the iron by wandering cells, probably leucocytic in their affinities and their development into erythrocytes, thus increasing the number of the red cells. It may be that

all these theoretical explanations of the action of feralboid are true and coincidentally existent, offering as they do explanations each more adaptable to one special case than to another. We have no proof that simple leucocytosis, which is so often fatal, is anything more than degeneration from insufficient nutrition. For many cases have been noted when a distinction could be very effectually made in practice between two classes of leucocytes, one of which was evidently genuine and the other spurious, that is to say, a cell which in its normal development would have been a red, non-nucleated body, but which had retained its nucleus from a too long continued embryonic state. If we assume this the miraculous success in the case of leucocytosis mentioned may be explained simply and logically, the food needed being presented, the proper development followed almost as a necessity. Should this be true the almost specific power of feralboid in the so-called anemia of pregnant or recently parturient women, which in nine cases in ten is proved by micro-examination to be a leucocytosis, may also be held to be assured.

It would seem also that the anemia which is known to follow la grippe and various "colds," and those obscure troubles of the digestive organs we call, for lack of better names neurasthenia, might be assailed with feralboid on another hypothesis. Finally in the entire group of cases associated with blood destruction from known causes as the plasmodium of true malaria and the like, still another hypothesis of blood nutrition points the unmistakable line on which to work. In the words of one of the surgeons who reaped the aftermath of the Cuban expedition, "Oh, that we had had such a preparation of iron during the summer! Why did you not bring this sooner to the notice of the profession? Think of the suffering you might have saved!"

Hyoscine in the dose of 1-100 of a grain is of much value in the treatment of nocturnal emissions.—*Hare, Ex.*

SCRAPS FROM MEDICAL HISTORY.

BY FRANKLIN STAPLES, M. D.,
WINONA, MINN.

NO. II.

IN A RECENT writing in the MEDICAL MONTHLY, some facts and features in the history of medicine were made to appear in brief notices of a few old medical works. These were the Aphorisms of Hippocrates, of Boerhaave and of Sanctorious, and the works of Sydenham. The first of these, although the edition at hand was published in this country early in the present century, represented the same as the original, the medicine of the ancients. The works of the other three eminent authors represented the best medical science of different parts of the eighteenth century in Italy, Holland and England. The present brief account may further represent the more advanced medicine of this period, as shown in the works of William Cullen (1712-1790), of Scotland; of Antonio Scarpa (1752-1832), of Italy; of Xavier Bichat (1711-1802), of France, and of John Bell (1763-1820), of England.

The time of the eighteenth century is reputed as the especial period of systems and theories in medicine, and of medical delusions. The vagaries of Paracelsus, Van Helmont and others of the sixteenth and seventeenth centuries still maintained an active existence, and were augmented by the works of Brown in England, Hahnemann in Germany and a few other theorists of this time. Most of these systems and pseudo "pathies" have disappeared under the light of modern science. The one that has been able to resist more successfully than others the progress of science, and this seemingly because of the continuance of a certain kind of unintelligent popular support, is that of Hahnemann. This, however, seems now to continue principally in name.

The names of physicians here mentioned, as among the promoters of true science and medicine in the latter part of the eighteenth and beginning of the nineteenth century, have now a place in history, the importance of which will suffer no diminu-

tion in the progress of time. These were not the sole representatives of the better part of the profession at this time, but what appears of their character and works will at least serve as illustrative—the part for the whole. In this instance it happens to be the greater part.

Cullen.—The life and works of no other physician have a larger place in the medical history of the eighteenth century than those of William Cullen. The history of his life from early youth was that of unremitting activity and devotion to his profession. His works contributed largely to the advancement of true science, and his fame has increased with the years that have passed. He studied first at Glasgow, went to London in 1729, and thence to the West Indies as surgeon on a merchant vessel. Returning to Scotland, he studied in Edinburgh, began practice at Hamilton, on the Clyde, and there became the friend and partner of William Hunter. The lives and works of the eminent English physicians, William and John Hunter, belong to the same time as that of the distinguished Scotchman, William Cullen. Cullen became professor of chemistry in the University of Glasgow in 1746, and ten years later began his work as professor of medicine in Edinburgh. Here his works were written, and here he continued his labors during the remainder of his life.

Cullen's work entitled "First Lines of the Practice of Physic," was first published in Edinburgh in 1774. It had been preceded by his work "The Institutes of Medicine," published in 1770. His work, the "*Synopsis Nosologia Methodica*," appeared in 1785; and the "Treatise on the Materia Medica," in two quarto volumes, in 1789. The edition of the "First Lines of Practice," which the writer now has at hand, was published in New York in 1805. The two volumes of the "Materia Medica," which are now before me, are of the original publication made in Edinburgh in 1789.

By way of parenthesis, a word may be said concerning the work of Cullen, entitled the *Synopsis Nosologia Methodica*. Cullen introduced his system in this, which he called the

classification of diseases on the natural history plan. His names of general classes were: I, Pyrexia; II, Neuroses; III, Cachexia; IV, Locales. Each class was subdivided into orders. This was in keeping with, and may have been suggested by methods then coming into use in other departments of science. Sauvages, the French botanist, had published his *Nosologia Methodica*, and the great Swedish botanist, Linnæus, had given a similar plan in his *Species Plantarum*.

Contemporaries of Cullen, other than those that have been mentioned, were Bordeu in Paris, Barthez at Montpellier, and Reil at Berlin. These have been designated as apostles of "vitalism." Their teaching concerning the relation of the so-called "vital force" resembled, but was not identical with the doctrine of the distinguished teacher at Edinburgh.

In physiology and pathology Cullen was a "solidist." With him the nervous system was the part of the organism in which vital action originated, and through the nerves it was carried to all organs and parts.

The following extract from the first chapter of the *Materia Medica* gives the doctrine of Cullen in his own words. The chapter is entitled "Of the Action of Medicines upon the Body in General." It begins as follows: "In these days it is hardly necessary to show that the action of other bodies upon the human is chiefly by the impulse of these bodies upon the extremities or other parts of the nerves of the human body; in consequence of which a motion is propagated from the place of the impulse along the course of the nerves to their origin in the brain or medulla spinalis; and that upon such occasion there does, for the most part, arise a sensation. This again generally gives occasion to a volition, whereby a motion is produced, which being determined along the course of the nerves into certain muscles or moving fibres, the action of these, as well as the various effects which their action is suited to occasion, is in consequence produced."

The nervous pathology of Cullen has come to the schools of the pres-

ent time extended and elaborated, rather than altered in principle.

The time of the work of Cullen in Edinburgh was that of the beginning of medical science and instruction in America. Among the American pupils of Cullen were Dr. John Morgan, Dr. William Shippen and Dr. Benjamin Rush, the early teachers in Philadelphia, and Dr. Samuel Bard, of New York.

Bichat.—The work of Francois Xavier Bichat (1771-1802), which is at hand, is entitled "Physiological Researches upon Life and Death." It was translated by Tobias Watkins, member of the Medical and Chirurgical Faculty of Maryland, and printed in Philadelphia in 1809. The work is dedicated by the author to "J. N. Halle, Member of the National Institute of France, and Professor of the School of Medicine of Paris." The Paris editor expresses regrets, that, because of the death of the author, the public had been deprived of certain advantages, viz. the appearance of certain articles in a revised edition in a more complete form and enriched with several new views. He says: "The reader would have found in it a treatise on beauty, considered physiologically;" and that; "in a second volume, physiological principles would have been applied to medicine; and the same order which has now been pursued, in considering the functions in a healthy state, would have been adopted to consider them also in a state of disease."

The greater work of Bichat was his "*Anatomie Generale*." He is mentioned by Baas as the founder of general anatomy, who says: "From Bichat's general and pathological anatomy a new tendency in medicine—that tendency which it manifests to-day—took its origin. Bichat's genius, masterly mental power and charming gracefulness of exposition, founded chiefly the realistic and pathologico-anatomical epoch. He uttered the famous apothegm "Take away some fevers and nervous troubles—certainly important and in many respects decisive exceptions—and all else belongs in the kingdom of pathological anatomy."

Scarpa.—The name of Antonio Scarpa, of Italy (1752-1832), has an

important place in the history of eminent surgeons and anatomists of the eighteenth century. He was professor, first at Modena and later at Pavia. A late English writer epitomizes concerning the qualifications of Scarpa as follows: "He was distinguished in every branch of anatomical research, and investigated the minute anatomy of nerves and bones. He decided the long debated question, whether the heart is supplied with nerves, in the affirmative. He wrote on diseases of the eye, on aneurism, and on hernia." The name has come to us associated with the anatomical region, known as Scarpa's triangle. It is a matter of historical interest to notice the names of pioneer anatomists and surgeons, as they are applied to anatomical parts or operations first described or performed by them. They serve as memorial tablets, whose inscriptions preserve the memory of scientists of past centuries, and something of the history of their works. Antonio de Gimbernat, professor at Barcelona from 1762 to 1774, was a distinguished anatomist and herniologist. The small ligament bearing his name preserves his memory and is suggestive of his work. In this connection might be mentioned the names of Anel, Petit, Desault and Chopart, French surgeons contemporary with Scarpa, and of Sylvius, Eustacheus, Fallopius, Paechioni, and others of earlier times.

The work of Antonio Scarpa which is at hand, is entitled "Practical Observations on the Principal Diseases of the Eyes." It was translated from the Italian by James Briggs, member of the Royal College of Surgeons in London, and printed in London in 1806.

In his preface the translator attempts to account for what he calls the slow advancement of surgery at the time, in two different ways which seem to be not altogether consistent one with the other. He says: "The slow progress is principally to be attributed to the great diversity and extent of the facts upon which it is founded:" and again, that "it had been in no inconsiderable degree owing to an imperfection in the manner of cultivating it; by surgeons either limiting their observations to

the diseases of some particular part of the body, or by directing their sole attention to some particular disease." This implied objection to specialties in surgery, on the part of the translator, may have been designed as a defence of the author, who being a practitioner and teacher of general surgery, had written a work devoted to a specialty.

The author, in his own preface, argues his case by charging "professed oculists" with making loud pretensions rather than of striving to accomplish good works, and says: "It is to be regretted, that even in the present day, some who have been regularly educated in surgery, no sooner aspire to the celebrity of oculists, than they immediately attach themselves to the marvelous, and cannot be withheld from inserting in their writing some traits less characteristic of the surgeon than of the empiric."

It is but right that specialists of the present day should have the comfort of knowing that this estimate of them was that of a hundred years ago.

John Bell.—The old work on surgery, now at hand, has the following title: "The Principles of Surgery, by John Bell, Surgeon; abridged by J. Augustine Smith, of the Royal College of Surgeons, London, and Professor of Anatomy and Surgery in the College of Physicians and Surgeons in the University of the State of New York, 1810."

John Bell (1768-1820) must not be confounded with the elder John Bell (1621-1780). John Bell, our author, was a brother of Sir Charles Bell. Both of these eminent men were from Edinburgh. A recent writer speaks of John Bell as "Professor of Anatomy, Surgery and Obstetrics, a busy practitioner, a fertile writer and not only one of the most successful operators of his day, but an excellent classical scholar." (Park.)

The following brief extracts from the editor's preface relate to the teachings of Dr. Bell, and show something of the views of contemporary and later surgeons.

He says: "Since the chapter on adhesion was printed, I have read Mr. Young's animadversions upon the practice there recommended by

Mr. Bell, but think no further cautions necessary to the use of sutures in promoting the reunion of divided surfaces." Reference is here made to the former practice of allowing wounds, however cleanly incised, to remain open, and to heal by granulation. It speaks of the advent of the suture.

The editor further observes: "Since the publication of the first volume, the celebrated Scarpa has written a work upon aneurism, in which he differs from Dr. Bell, and indeed from all his immediate predecessors, as to the manner in which these tumors are formed."

And again: "I have deemed it unnecessary to transcribe Mr. Bell's observations intending to prove that the inosculating vessels are sufficient to support a limb when the main artery is tied."

With regard to the best method of treating fractures of the lower extremities, he says: "I have doubted that a state of flexion and consequent relaxation of the muscles during the tendency to inflammation, was the best position in which they could be placed, until I understood that Dr. Physick entertained a different opinion and taught a contrary practice." Here evidently is the straight splint and extension.

Who were the owners?—As an appendix to this paper, I will give the names and designations of former owners of most of the old books, to which reference has been made, as they appear written in the books, and in this connection I have a query and a request. First, who are the physicians, whose names are here given, and when and where may we locate them? The request is that some reader or readers of the MEDICAL MONTHLY will furnish the answers to this inquiry.

On a leaf of the little volume of the "Aphorisms of Hippocrates" is written the name of "Dr. Ford." (The late Dr. John D. Ford was a practicing physician at Norwich, Connecticut. He moved to Minnesota in about the year 1855. He was a gentleman of culture, and at once became a leader in educational matters in the new state of his adoption. He was the principal founder of Minnesota's excellent system of State Normal

Schools. A part of the old medical works here noted came to the writer from the library of Dr. Ford.)

The name of Timothy Little appears on the title page of Cullen's "First Lines of the Practice of Physic," and the first volume of the *Materia Medica* is marked as "Henry S. Lee's Book."

On the title page of "Physiological Researches upon Life and Death," by Xav. Bichat, is written, first, J. Aug. Smith. A line is drawn through this signature and below it is the name of D. W. Kissam, M. D.

On the title page of Scarpa's *Diseases of the Eyes* is written a monogram which appears to be "E. P. B.," followed by the words, "Bought of Henry H. Anderson, London, 1810." The year of the publication of this book was 1806.

Bell's *Surgery* has written on a fly leaf the name, J. Spaulding.

On the first blank leaf of Swan's edition of Sydenham is written (the Latin and name being copied as written), "*Annus De Nostrum Domine*, 1762. Abijah Scvell, *Ejus liber*." It is written on another page as follows: "Doct'r Abijah Schovell, *Ejus Liber—Annum Nostrum Domine*, 1763." This book was published in 1753.

On the title page of Rush's Sydenham, which was published in 1809, the name of Jas. F. McMurray appears.

On a fly leaf of the volume of Boerhaave's *Aphorisms*, evidence of former ownership appears in the following signatures: "John Crane of Northbury." On the same page, in a fine hand, and evidently written at a later time is the following: "*Medicus—John Crane—Physicus. Ignoramus ubi inventus sit*." Again, on the same page, "Joseph Woodbridge, *ejus liber*, A. D. 1786." On the reverse of this leaf, written somewhat in a John Hancock style of signature, is the name, Ephraim Fellows; and again, E. Fellows, 1802.

The old works here noticed are a few of the medical text-books which were in use at the beginning of the present century, now nearly past. The names which appear as those of the original owners, were mostly names of early physicians in this country. We do well to preserve, as

far as we may, a record of the lives and works of such as these in our history.

ON PHYSICAL EDUCATION.

BY C. P. ROBBINS, M. D.,

WINONA, MINN.,

Member Winona County Medical Society; Southern Minn. Medical Society; State Medical Society; American Medical Assn.; Late Assistant Surgeon, P. B.: N. H. D. V. S., etc., etc.

ARTICLE II, "DIET."

IMMUTABLE law seems to exist in every department of nature. Chemistry, astronomy or natural creations, this sway of law is supreme. Apply the thought to man, the highest type of nature's works, it is found that here law likewise reigns supreme. Advancing knowledge of physical law has been accompanied with advancing power over the physical world. Rules exist for the physiological processes. Digestion, absorption, respiration, circulation, all follow definite laws laid down for man's comfort and health. Physiologic laws are not to be accounted for in physical and chemical effects alone, but by mental power we regulate the essential elements that are prerequisite to the natural workings of the body.

Thus the quantity and quality of food for man, and time of taking, should be regulated in harmony with the physiological laws governing the process of digestion, assimilation, absorption, disintegration, nutrition and excretion.

All living animal structure undergoes waste, atom by atom, which renders it necessary that there should be present new vitalized materials in the fluids of the body constantly, to replace materials lost, and thus maintain the integrity of the tissues.

During the state of growth and development the amount of food assimilated must necessarily exceed the amount of tissue waste, by the process of oxidation. But in adults the amount inhaled each day should equal as nearly as possible the amount lost by the process of oxidation.

Now "diet" is considered by the masses to mean the amount of food, of solids or liquids, taken into the stomach, but should also include the amount of air taken into the air cells

of the lungs. No satisfactory repair of tissue can take place which is constantly undergoing disintegration, but with suitable supply of healthy blood, and healthy blood is the product of thorough aeration and proper food, derived from normal digestion.

When we stop to consider that the oxygen thus derived from the air is nature's exciter of nerve excitability and muscular contractility, as well as the active oxidizer of all burnt up tissue, we must recognize it in assimilation, excretion and nutrition.

"Diet" then, in its proper conception to body metabolism should mean the air we breathe and the food we eat and drink. When air is breathed, in the process of respiration, the oxygen of the air passes into the blood, and carbonic acid, the vapor of water, trace of ammonia, passes out, changing the blood from the dark purplish hue of the veins to the scarlet of the arterial blood. In the tissues another respiration takes place, in the oxidation of tissue and formation of carbon-dioxide.

So essential to life is the proper amount of oxygen, that, even for a short space of time, without it, danger exists. It becomes as necessary for each individual to have a sufficient amount of pure air for the lungs, as an adequate supply of pure food for the stomach. It is usually conceded that without a sufficient supply of the former, the digestion and assimilatory organs cease to make use of the latter. The oxygen of the air is just as essential to nutrition as are the albuminoids, proteids and carbo-hydrates.

Air inspired, like food inhaled, depends upon the quantity and quality for healthy conditions. Habits of dress, habits of life, habits of living, influence the quantity and quality respired. In women the habits of dress afford too much restriction to respiratory movements, as is shown in the restricted chests from the *vices* that enshrine them. In man the habits of life, as tobacco, inhibits respiratory movement, or alcohol, anæsthesia or over stimulates respiratory action, lessening the quantity of air. Not alone this, but the capacity of the blood to take up the proper amount of oxygen is influenced by their presence.

But both men and women are addicted to the habits of living which include the over-crowded, ill-ventilated, uncleanly homes and workshops of any and every kind, and necessarily lessen in a marked degree the quantity and quality of air respired.

Nature supplies us with unlimited amount and of the best quality at all times without labor or expense, but man's chief means is to impair its quality and lessen the quantity.

There are three wicks to the lamp of a man's life; brain, blood and breath. Press the brain a little, its light goes out, followed by both the others. Stop the heart a minute and out go all three of the wicks. Choke the air out of the lungs and presently the fluid ceases to supply the other centers of flame, and all is soon stagnation, cold and darkness.

Before the consideration of foods we eat and drink as a part of diet, it may be said that as long as digestion waits on appetite and health on both, the relation that appetite bears to nutrition is prerequisite, before the consideration of food itself. In fact, the fate of a nation has often depended on the good or bad digestion of a prime minister. Appetite is the pleasurable desire for food and drinks. It is aroused by both mental and physical conditions, such as the smell, taste and sight of foods, good hygienic surroundings, exercise, bathing, stimulating air, agreeable companions and the proper preparation and serving of food. Stimulated also by bitters, condiments, etc., making it one of the most capricious sensations subject to all manner of disturbing influences. Appetite governs to a great extent the foods we eat and drink. In this consideration the most good, the best health, or the longest lives are not achieved by enforcing limitation on the sources of food, so abundantly provided, but the adaptation of food of any and every kind to the needs of the body according to the different conditions and circumstances of the individual, and the ages, habits and personal peculiarities.

Food of all sorts may be made available and even essential to life in their turn, when we pause to consider how varied are the races of men and how dissimilar are climatic conditions.

How the inhabitants of cold climates consume large amounts of flesh and fats, how those of hot climates live chiefly on vegetables, and how those of temperate climates use a mixed diet. The latter depending on age, habits and other conditions. It is evident that man requires a mixed diet. Vegetable diet is good in certain morbid states and the same may be said of animal diet. Man and all higher animals are non-vegetarians, for they begin the first years of their lives on animal food (milk). Rational diet does not place limitation on food resources, nor teach that universal benefit can come from limiting mankind to any particular class of foods. Animal, vegetable and mineral must have their varying proportions according to the age, climate and amount of work and excretion of the body. The perfect and prolonged maintenance of health require a certain proportion to be in a fresh state. Food requirements are thus governed by age, habits of life and state of health.

Let us trace food requirements through the different periods of life. The infant food is milk and the best milk is that supplied by the mother's breast. Artificial feeding is well known to lead to indigestion, flatulence and diarrhea. 37¼ per cent. of death of infants are due to disorder of the alimentary canal.

Before teeth-cutting an infant should have no starches, as digestion of starch previous to that period is impossible. As soon as the infant has cut its first four teeth it may be weaned not later than the tenth month. From this time on until three years of age carbo-hydrates are gradually added, as oat meal, broths, mashed potatoes and crackers. At three years of age and later a variety of diet begins and a child consumes nearly one-fourth as much as it requires in adult life. During this process, tissue growth is very rapid. At twelve to fifteen years of age, food requirement and assimilation is as much as man past middle life. A larger proportion of fatty foods are used than at any other period of life.

Between the age of adolescence and advanced age nutrition reaches its maximum and diet may include

the greatest variety of foods of every and any kind. It is at this period of life food requirement is governed more by habits, occupation and peculiarities; and to formulate a standard diet for universal application would be impossible as there can be no fixed diet. The wants of a healthy adult are measured by appetite, providing this is not perverted by exercise, unwarranted practice and habits. When over-indulgence manifests itself, the organs of digestion and excretion become over-taxed and weakened and susceptible to disease and over-nourishment is not oxidized but stored up. The result brings intellectual enfeeblement, muscular inactivity and weakness.

There is quite as much danger coming from deficient (improper) feeding as from over-feeding. When the growth of the body and development of all the organs is complete, food then is used in maintaining the proper equilibrium of the tissues by replacing waste with new vitalized material, and to furnish fuel for the development of force necessary to carry on all physiological laws. But the great majority eat more than is required for these purposes. In old age there are inevitable changes which occur slowly in the digestive and circulatory organs of the body. For this reason the power of digestion is less vigorous, but on the other hand, there is not as much demand for fuel in the body as in earlier years. People of advanced years can live on very little. Rules (physiologic) which seem more plausible here would be: 1. To diminish the total quantity of food digested. 2. To give food at regular intervals. 3. To give only easily digested food which does not produce too large residue either in the intestinal canal or in the form of excrementitious matter in the blood.

We have seen what part age plays in the principal periods of life as regards the food we eat or drink. We have yet to examine habits, occupation and personal peculiarities. We find in occupation the work expended by an out-of-door laborer is greater than a clerk, or he that leads a sedentary life. Necessarily the amount of energy would be greater in that of an artisan, and therefore

the more completely the waste tissue would be oxidized, excretion would be more perfect and assimilation more active.

In case of the artisan, the natural automatic regulation of diet would be quite possible, as the digestive processes have greater power and body metabolism more complete. While he who leads a sedentary life is harassed by minor ailments, which constantly grow worse, making life miserable and the regulation of diet necessarily less easy. Few people believe how easy it is to overcome difficulties by adopting appropriate food, of light and simple diet and let moderation be the silken thread that holds the pearl of health.

In regard to peculiarities, temperament plays by far the most important rôle. Food for the languid disposition with sluggish nerve force would be poor nourishment for the excitable, nervous temperament. In the latter a careful avoidance of too nutritious and over-stimulating diet, and active exercise would be desirable for the former, while the vehement temperament would do well on light diet of fruit and vegetables. Food for men and women differ, for both are peculiarly constituted and mode of life different in each. Physiologic deduction and the universal results of observations and experiences unite to show that women require nutritious diet in smaller quantities than the men, being conspicuous in their natural sphere for less active tissue change, for less muscular power and a calm, contemplative activity of the brain. The procreate faculty has a special and characteristic influence upon her life, which demands particular attention to diet in all states of wife or motherhood. Food requirements, as stated before, depend largely on quantity and quality, on frequency of meals and manner of eating.

Quantity of food is regulated by habits, occupation, age and state of health. The more concentrated food the less in quantity is required. Quality of food is governed by the art of cooking and selecting. Great variety of food is served from meal to meal and day to day, with better results than where a great variety is served at one meal, as one is tempted to in-

dulge because it is attractive and palatable, and not because the appetite has been appeased.

Regarding the frequency of meals proper food requires two to three, and sometimes four, hours for digestion, and if we add two to three hours for gastric repose, it would make the desirability of eating more than once every six hours during the day and double that time during the night, when the mind is supposed to rest in sleep. The general custom of taking three meals a day is in harmony with the physiologic laws governing the functions of the body. It is certainly wrong to eat three times a day during the week and twice on Sundays. Regularity as to time of eating, equally separated, the same every day, is of the utmost importance.

The manner of eating influences digestion greatly. Many people eat too fast, thus injuring digestion and injuring vitality. Food must be thoroughly minced before prehended. It must be thoroughly masticated before insalivated, which includes time and good natural or artificial teeth. It must be incorporated with saliva before deglutited, and the mind must not be on stock accounts, lessons, household cares, etc., or the digestive organs will have to lose a great deal of vital force.

A brief rest from labor before meals stimulates appetite and digestion, while at least half an hour of mental and physical repose after each meal is essential to the best interest of health. Our food should be taken with the best of mental cheerfulness without too much haste, and in an atmosphere of pure air with its quality and quantity not lessened by the habits of dress, habits of life or habits of living, with a repose of mental and physical labor before dining and after.

The voyage of life is before us; and on this sublime voyage to the land of immortals, to the Palace Beautiful in the skies, let us start from the dear old home of childhood, that home which, though it may be desolate, is still imperishable in memory.

It is a solemn fact; we have started upon it; let us try to understand it; let us grapple with its mysteries; let us think much of its responsibilities.

Life bears us on like the stream of a mighty river. Our boat at first glides down the narrow channel, through the playful murmurings of the little brook and the windings of its grassy borders. The trees shed their blossoms over our young heads; the flowers seem to offer themselves to our young hands; we are happy in the hope and grasp eagerly at the beauties around us, but the stream hurries us on and still our hands are empty. Our course in youth and manhood is along a deeper and wider channel, among objects more striking and magnificent. We are animated at the moving pictures and enjoyment and industry all around us; we are excited at some short-lived disappointment. The stream bears us on and our joys and griefs are alike behind us. We may be shipwrecked, but we cannot be delayed. Whether rough or smooth the river hastens on until the roar of the ocean is in our ears and the tossing of the waves is beneath our feet, and the floods are lifted up around us, and we take leave of earth and its inhabitants, until of our future voyage there is no witness save the Infinite and Eternal.

URIC ACID AS A CAUSE OF ASTHMA.

L. H. WATSON, M. D.,
CHICAGO, ILL.

ASTHMA is usually considered as a neurotic affection, dependent upon some irritation of the pneumogastric nerve, and characterized by bronchial spasm, and accompanied by an exudate of mucin.

While this may be a fair statement of the condition, it does not explain the etiology of the disease. An irritable condition of the respiratory nerve centres, caused by an impression made upon them, either through direct contact, or through morbid material in the blood current, exciting a reflex spasm, would seem to be the principal agent in producing this paroxysmal condition called asthma. Long have we sought the cause and found it not. Von Leyden thought he had it, when he exploited the Charcot Leyden crystals, and Curschmann's spirals; now we know they are

only an accompaniment, and while diagnostic of asthma, do not at all account for its existence. They are simply confirmatory signs when the diagnosis is complicated; indeed the crystals are said to be found only late in the attack. We have been accustomed to divide asthma into two classes idiopathic and secondary, but it is extremely doubtful if we see a case of genuine idiopathic asthma. By searching we can trace a cause immediate or remote. We have mechanical causes, like thymic asthma, nasal polypi, the pollen of plants, drug dust, disease of the spine or heart. We have chemical causes of a toxic nature, due to blood toxins taken up from the stomach or intestines, and failing of elimination by emunctories, remain as elements of discord exciting the paroxysms.

Heredity has been supposed to play a large part in attacks, but only through hypersensitiveness of the nervous system. Locality undoubtedly influences the recurrence of the spasm. Some people cannot exist comfortably in the country, and are free from attacks in town. I once had a patient, a very intelligent man who could not sleep on the ground floor of his house but was free of attacks in the second story. Many idiosyncrasies attach themselves to attacks of asthma, and it would require a larger article than this to trace them all.

I desire to call attention particularly to the "uric acid storm" as a factor, and a large one, in the production of the asthmatic paroxysms. Haig says in *International Clinics*, Vol. III:

"My researches leave little doubt that asthma represents the effect of uric acid on the circulation in the thorax, and that it is paroxysmal, for the same reason that epilepsy and migraine are paroxysmal, in accordance with the natural fluctuation of the uric acid, and the amount of that substance passing through the blood, and furthermore the only way to treat asthma is to clean the blood of uric acid and keep it clean."

This is a strong statement, but facts bear out Haig's assertion. Long before the uric acid hypothesis was understood, physicians depended upon iodide of potash as a curative

remedy, but it was not found of great service in dispelling the attacks. The use for two or three weeks before an expected paroxysm seemed to abort it, and the iodide was deemed almost a specific. What it did do was cause the elimination of uric acid and thus lessen the irritation upon the vagi nerves, which precipitated this attack. It remained for Haig to explain the reason in an intelligent and scientific manner.

While I will not go so far as to say that all cases of asthma are caused by uric acid, I do say that almost all cases are benefited by attention to the elimination of uric acid, and many cases are absolutely cured when the proper methods are adopted and certain dietary plans are accepted which shall prevent its accumulation. It is a well-known fact, well known especially to asthmatics, that they cannot transgress the rules which govern proper digestion and assimilation, or they will pay the penalty.

My first method is to insist upon a rigid diet list, excluding all the producers of nitrogen, and then begin the treatment with thialion, which is certainly one of the most efficacious remedies we now possess for removing the excess of uric acid in the blood, and picking up the deposits in the forms of urates which have been already deposited to the tissues ready to contaminate the blood stream when the conditions are favorable. Abjure then, all nitrogenous supplies, and put the patient upon thialion for two or three weeks; longer if the case be an obstinate one. You will be fully repaid for the attempt.

There is no doubt also that uric acidæmia when it contracts the arteriols will certainly suspend gastrointestinal digestion and absorption, and allow putriferous processes to take place, which shall furnish toxins that will find their way into the circulation, and thus again act as irritants, while producing high arterial tension. An asthmatic attack represents the thoracic effect of this tension. Two confirmatory facts would seem to favor Haig's hypothesis; the first is that most attacks of asthma occur at from 2 to 4 o'clock in the morning, when the uric acid

flood is at its height, and the other is that after an attack of asthma, as after a uric acid storm, there is a flow of limpid, pale urine in great abundance. Upon the whole the uric acid theory offers us, perhaps, the most feasible theory known at the present day to account for the peculiarity of asthmatic attacks. I append two typical cases.

Miss L—, a maiden lady, 50 years of age, a long sufferer from hay fever, which usually begins in August and lasts until the first frost. In Nov., 1898, she suffered from persistent asthmatic attacks which were supposed to be due to the hay fever. Obtaining only small relief from all the usual remedies she placed herself under the care of a specialist, who proceeded to cauterize and burn out the redundant nasal mucosæ, which seemed to be the irritating cause of her attacks. The asthma continuing, she came under my care. Discovering her to be a confirmed dyspeptic, I first attended to her diet and placed her upon thialion. In a couple of weeks relief came and in six weeks after the treatment was commenced, she had no further attack.

The second case was that of an old asthmatic, Mr. K—, who was also an old dyspeptic. Winter and summer this gentleman, who possessed a large amount of this world's goods, was constantly using Himrod's pastiles and cursing his fate. Thialion combined with treatment directed to get his stomach in fair condition, has so relieved him that I cannot persuade him to stop its use. He takes it constantly every morning in hot water, and while he wheezes a little now and then when he has been indiscreet at table, he is practically well.

100 STATE STREET.

—:o:—

DIARRHEA.—A writer in the *N. Y. Med. Jour.* says: The objection to tannic acid has been that it had to be given in large amounts, which frequently irritated the stomach and the greater part of it was absorbed in the upper part of the gastro-intestinal tract, so that very little of it passed into the lower intestine as such. This disadvantage has been overcome by the introduction to the

profession of tannic acid combinations which have been experimentally shown to pass through the stomach unchanged and to liberate their tannin only when coming in contact with the alkaline fluids of the intestine. The latest and most valuable of these is undoubtedly tannopine, a condensation product of tannic acid and hexamethylenetetramine. As regards its physical properties, it is a brown, odorless and tasteless, fine, non-hygroscopic powder, insoluble in water, weak acid, alcohol, ether, etc., but slowly soluble in alkaline fluids. It contains about 87 per cent. of tannin and 13 per cent. of hexamethylenetetramine. The dose of tannopine is fifteen grains for adults, three or four times daily and from three to eight grains for children. These doses may, however, be exceeded with impunity, as it has no poisonous property so far as is known.

In the serous form of diarrhea, where there is only an increase in the number and consistence of the passages, tending to diarrheal discharges, without much constitutional disturbance, such as fever and pain, I formerly used with great satisfaction the salicylate of calcium, according to the following formula:

R Salicylic acid, gr. ij.
Prepared chalk, gr. iv.
Syr. of ginger, *m* xx.
Peppermint aq., q. s. to make 3 j.

M. Sig. Such a draught to be taken after each movement.

In cases of dysenteric diarrhea, where there is much tenesmus, the stools being frequent but small, consisting in greater part of mucus, with perhaps some streaks of blood, the old-fashioned castor oil emulsion with an astringent, like bismuth or tannopine, and a small dose of opium cannot be excelled. The usual formula for a child is:

R Castor oil, *m* viij-*x*.
Powd. gum arabic, q. s. to make an emulsion.
Tannopine, gr. iv.
Camphorated tinct. of opium, *m* x.
Peppermint aq., q. s. to make 3 j.

M. Sig. This amount to be taken every two hours.—*The Med. Bull.*

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William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

THAT ARMY INVESTIGATION.

THE MEMBERS of the investigating committee are still investigating and the public is waiting very patiently for the verdict. The careful newspaper reader has long since arrived at a few conclusions of his own which, though perhaps identical with those of the Board, will nevertheless remain unpublished—and never be incorporated in an official report.

There are some facts, however, which seem to be open secrets, and have received general recognition as such. There was evidently some conflict of authority among the high army officials from the first, and the acts of the chiefs of several of the departments strengthened materially the *casus belli*. Again, the various subordinates, who in many instances were professional politicians and notoriously unfit for any position whatever, conducted themselves as might have been expected, and were the cause of many of the minor scandals which were features of the campaign. Further investigation will, perhaps, establish the fact that those who awarded many of the contracts were pecuniary gainers thereby; and that if inferior goods were delivered, it was for good and sufficient reasons. However great the effort to cover up various shortcomings on the part of these men, it has failed in its object, and nearly everyone is convinced that these supplies were sometimes lack-

ing in quantity and inferior in quality, expert opinions and microscopical and chemical examinations to the contrary, notwithstanding.

While the verdict is at the present time a matter of doubt, the guilt of many of the officials is a foregone conclusion and even though warfare may never be divorced from politics it would be a source of great satisfaction to witness the downfall of the leaders of so pernicious a system, and the punishment of those who bartered the lives of their fellowmen for a few pieces of silver.

INFLUENZA.

THE ABOVE disease, which in many portions of the country is now epidemic seems somewhat erratic in its outbreaks and manifestations. While for a long time there have been noted in various countries irregular and localized epidemics it is a long time since this disease embraced any very large territory and hence it came to be considered an affection of no great importance. The visitation of a few years ago, however, convinced the profession of its serious nature and now it is generally classed among the more fatal diseases.

While the term "influenza" may be a good definition for the malady in question, it certainly differs in many respects from the old affection which passes under that name; for the present type is marked by several new features—namely, extreme depression both mental and physical, tendency to involvement of lung tissue and serous membranes, and various impairments of the nervous system of a most obstinate character. Many of us have patients to-day who are suffering from the sequelæ of our first epidemic and who will doubtless bear the scars of the conflict for years to come. At the same time it is not unusual to meet with cases which are promptly overcome by the virulence of the disease and

succumb to the same almost before we have arrived at a diagnosis. While serious enough at any time of life, it may justly be considered one of the most fatal affections of the aged and a well-marked case should here call for the gravest prognosis.

While no one drug can be said to exercise anything like a specific effect, the treatment is fortunately well defined in character.

Free elimination by skin and bowels and the free use of ammonia and alcohol with the coal-tar products to reduce temperature and opiates to relieve pain. All other forms of medication are ineffective and with perhaps the exception of the salicylates, do more harm than good.

While *la grippe* is produced by an atmospheric germ not yet clearly defined, its course and progress is marked by many lapses and vagaries. Many portions of the country in the very track of the storm, enjoy at times an almost complete immunity, while others are visited by the disease in a modified form.

The true contagious and infectious nature of the malady is by no means fully established, yet further research will no doubt establish the fact that direct contagion has little to do with the spread of the epidemic.

It seems reasonable to suppose that from this time on we shall enjoy frequent visitations from this new candidate for newspaper notoriety and hence it behooves us to admit it to the list of newcomers and treat it accordingly.

—:O:—

ANTISEPTIC FLUID (SEILER'S).—

R Thymol,
Eucalyptol, aa gr. x.
Menthol, gr. v.
Ol. gaultheriæ, gtt. vj.
Sodii benzoati,
Sodii boratis,
Sodii salicylatis, aa gr. xx.
Glycerini, ʒ ss.
Alcoholis, ʒ j.
Aq., q. s. ad ʒ viij.

The Atlanta Med. and Surg. Jour.

After Office Hours.

III.

“WHO WAS the young lady I met coming out?” I asked, as the doctor wrote several names at random on the office slate, and, hanging it outside, deliberately closed and locked the door.

“Oh, that was another trained nurse in search of a case!” he replied; “they come in most every day, but about the time I have use for them they mysteriously disappear. Where they all come from and whither they go are questions which remain unanswered. Did it ever occur to you that all these women are comparatively young? Now, where are the older ones?”

“Perhaps they have married eligible patients,” I suggested.

“Exactly! They have attained Nirvana. They have done just what they started out to do, and their worldly wisdom often enables them to make a successful choice. We all know of what the nursing profession is composed. Of a goodly number who are intelligent, and who have no other aim but advancement in their chosen work. Then come the society girl and the girl about town, who take up the work as a fad, who are very impressionable, and who are always on the lookout for a good thing. The remainder are composed of working girls—some partly educated and intelligent; others stupid and ignorant. These go into the thing simply for the money that is in it, but often, in course of time, develop into fairly good nurses. The training schools of to-day, with their excellent methods, soon weed out the confirmed idiots and make the most of the material that remains, but they cannot perform miracles. If a girl is well-bred, good looking and agreeable, this extra training will enable her to get into the twenty-one-dollar circle and stay there; but the nurse who, though

well trained, is lacking in the above attributes, will attain success only by accident or strong influence, and even then will very likely drop down eventually into one of the lower classes."

"But what about the effect of this work upon the girl herself?" I asked.

"This profession is a very dangerous experiment—so much so, that those who know most about it hesitate to permit their own daughters to engage in it. There are of course many who would not be much injured by the life, but a great many who go through the fire come forth with plumage a trifle seared and discolored by the high temperature, and as you study them closely, you note that the indefinable, which forms a chief part of woman's charm, is not there. She is wise as a serpent, and at the same time hard and matter of fact. This seems to me the natural result of a life led by young women under such conditions and surroundings. The leading lights of the nursing profession may talk to me forever of lofty aims and high ideals, but I tell them they have too much sentiment and too little common sense; that they are describing the exception and not the rule, and that their description by no means applies to the large number of young women now in circulation. The office typewriter girl has been roughly handled by the public, but, compared with the trained nurse, her surroundings are elevating and her safeguards impregnable," and the Doctor paused to turn down a leaf in 'Hymns that have Helped Me,' and gathered together several photographs, which exhaled a faint odor of violets.

"But even these are better than the old-time nurses," I remarked, desiring to avoid any discussion of things which failed to accord with any of the principles of the Monroe doctrine.

"Well, the old-timer had her faults and failings, but she also had

many good points which rendered her at times a valued assistant. At present she is not popular, and in time may disappear wholly from among us. The movement has been in existence for many years, and, I have no doubt, first took a definite shape in Dickens' day, when the type was so mercilessly ridiculed. Everybody became familiar with the characteristics of Mrs. Gamp, who used to sound her own praises over the head of the mythical Mrs. Harris, whose opinions were always identical with her own; and whose ignorance was equalled only by her arbitrary ways and her inordinate self-conceit. Do you remember how she used to terrorize her poor old patient Mr. Chuffey when he ventured to offer a feeble remonstrance? And yet, according to her own estimate, no one had a more charitable and benevolent disposition. 'Mrs. Harris,' I says to her, 'if I could afford to lay out all my fellow creeturs for nothink, I would gladly do it. Such is the love I bear 'em;' and gently squeezing her patient's windpipe to make him open his mouth, she gently administered the hourly dose of medicine. I suppose every physician can recall similar characters who have officiated as monthly nurses. I have one now who is a typical relic of by-gone days. Not quite so rough, perhaps, or with so strong a predilection for gin as Sarah possessed, but in the matter of gossip and the number of private opinions publicly expressed she would pass for her own sister. Her methods antedate the Dark Ages, and in the more or less vacant compartments of her brain she carries an assortment of never failing cures which I strongly suspect she sometimes administers to my patients when I am not present.

But as she has an abiding faith in me and entertains the neighborhood with my miraculous cures, I cannot conscientiously obliterate the old lady, though often disposed to do so."

"These women certainly have a place in the world," I said, "for though the patient may suffer, the doctor is amused and entertained."

"Yes; I wouldn't have them educated, even though they were capable of it, for they would then cease to be interesting and become simply insipid and unendurable. As it is, their variegated characters, when not too exasperating, serve to instill a little humor into professional work, and light up with a transitory gleam the pathway of the medical wayfarer. One day we will find in the sick room one of the dissatisfied type. She didn't want to come, but the folks were so set on it that she left everything in order to be here. She don't understand the exact nature of the patient's trouble, but it seems very strange to *her* that she doesn't get better, and she often takes occasion to ask the invalid, in a casual sort of a way, if she feels satisfied with the progress she is making and why she don't ask the doctor to give her something to relieve her. She looks upon her patient's sufferings as a personal reflection upon herself, and she usually ends her list of grievances with the remark: 'Well, if she don't get better pretty soon I don't know what I'm going to do.'

Sometimes, however, we find there one of the irrepressible variety. Immediately upon her arrival she institutes radical changes in everything about the premises. She turns the bed around and slams the doors and at the same time she wonders how the poor woman ever lived so long in such a condition. Every few minutes she bathes her in saleratus water and applies "drafts" to her feet, and shakes up the pillows, and then she brings her some distasteful article of food and insists upon her taking it. 'For if you don't, you will never get well!' This lady receives us at the door and never loses sight of us for a moment, monopolizes the conversation and gives us to understand that we must be gay, and that our patient must be

cheered up and diverted, for a cheerful smile is better than medicine. Now, old Mrs. Jones is quite a different sort of a girl, for she belongs to the lugubrious type. She is inclined to be teary and believes that the days of man are few and full of trouble—and she often says so. Mrs. Jones has just been nursing a terrible case and she is tired *almost* to death. This woman suffered untold agonies before she died—"indeed her case reminds me very much of yours, Mrs. Smith, but when they told me you was sick and wasn't expected to live, I says to myself, I'll come and do the best I can even if I can't do no good," and wiping away a tear with the right hand, lower corner of her apron, she closes the windows, draws down the shades and makes the usual preparations for the funeral.

As she feeds her in a hopeless sort of a way with her own favorite gruel, she tells her she is a poor thing and that her sufferings must be very great. However, she tries to divert her by enumerating all the fatalities of the neighborhood and remarks that for sickness and death the present year has been the most remarkable one in her recollection. This lady doesn't pretend to do much work for she believes the patient should help herself as much as possible, so she sits by the bedside and calls the attention of the patient to the symptoms which have escaped her notice and reminds her that she must bear her trouble with patience and resignation. Her demeanor at the time of the doctor's visit is grave and subdued and the words and acts of the patient are received with meaning looks and a wise shake of the head as much as to say: 'It is just as I expected!' As we are about to leave, she draws us mysteriously into a dark corner and with a half hopeful and complaisant intonation whispers: 'She ain't no better, doctor, is she? How long do you think she will last?'

Of course there are many phases of the old time nurse but they are but variations of the types I have mentioned and while some of my patients have no doubt suffered from their ministrations, I owe them a debt of gratitude for the amusement they have unconsciously furnished. But they are fast passing away, and as their shuffling, and at times uncertain footsteps echo along the corridors of time, I experience a feeling of deep regret and real bereavement." And as the doctor regretfully disposed of the unexpended balance of the original pint, the bell in the neighboring church tower admonished us that the old was passing and that a new day had begun.

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Book Notices.

ANTIDIPHThERITIC SERUM (ANTI-toxin). Clinical Reports of the Employment of Parke, Davis & Co.'s Product in Hospital, Municipal and Private Practice. Collated, from Current Medical Literature. Press of Parke, Davis & Co., 1898-1899.

This little book containing the reports collated from current medical literature gives the latest in regard to antitoxin for diphtheria. The publishers will send a copy to any physician, and it is well worth a place in every library.

PRACTICAL LESSONS IN NURSING. Fever-Nursing. Designed for the Use of Professional and Other Nurses, and Especially as a Text-Book for Nurses in Training. By J.C. Wilson, A. M., M. D., Author of "A Treatise on the Continued Fevers." Third edition, Revised and Enlarged. Philadelphia. J. B. Lippincott Company. London, 36 Southampton St., Strand.

This book embodies a course of lectures on fever-nursing, which were originally delivered by Dr. J. C. Wilson before the nurse class at the Philadelphia hospital. The Doctor treats the subject in plain words and from the standpoint of the physician, to teach not only how fever patients are to be cared for, but also why they must be cared for in particular

ways. The directions and descriptions are intended to meet the needs of the professional nurse and others who may be called upon to take care of fever cases, and to enable each class to understand the principles of treatment upon which the directions to the physicians are based. It is bound to prove a useful addition to the doctors' library.

A DIGEST OF METABOLISM EXPERIMENTS in which the Balance of Income and Outgo was Determined. By W. O. Atwater, Ph. D., and C. F. Langworthy, Ph. D. Prepared Under the Supervision of A. C. True, Ph. D., Director of the Office of Experimental Stations. Washington. Government Printing Office.

As long as food has to be taken into the system in order to sustain life, so long will the process of digestion go on and prove interesting to all. These large experiments in metabolism undertaken by the government are of great value, opening up as they do a wide field of research and bringing together many important results from the experiments of others as well as those made in the department of agriculture. Our government is doing much for medical science, and this is not the least of its efforts.

BACTERIOLOGICAL DIAGNOSIS: TABULAR Aids for Use in Practical Work. By James Eisenburg, Ph. D., M. D., Vienna. Translated and Augmented, with the Permission of the Author, from the Second German Edition, by Norval H. Pearce, M. D., Surgeon to the Out-Door Department of the Michael Reese Hospital; Assistant to Surgical Clinic, College of Physicians and Surgeons, Chicago, Ill. Philadelphia and London. The F. A. Davis Co., Publishers. 1899.

It is in daily practice work that we learn the truth of the remarks of Dr. Koch that "The further bacteriological investigation advances, the more obvious becomes the fact that it is absolutely unallowable to base our diagnosis of a given bacteria upon anything short of a careful consideration of all its characteristics and properties, and especially when such a bacteria resembles another in one or more respects. Thus, there exist many forms of bacilli which, mor-

phologically, are almost indistinguishable, but which, in pure culture on potato or gelatin, or on inspissated blood-serum, differ essentially one from another." And thus a well-defined demand has arisen for a work in which the specific differences of the bacteriæ shall be tabulated for ready reference, and it is with this end in view that the author presents this very respectable volume, which is very necessary to the progressive practitioner.

TRANSACTIONS OF THE IOWA STATE Medical Society, Vol. xvi. Forty-Seventh Annual Session. 1898. Burlington, Iowa. The Keehn-Hafner Mfg. Co., Printers and Binders.

This large volume contains the proceedings of the Iowa State Medical Society, which in themselves are of a good deal of interest; besides this we find a number of very interesting and instructive papers. One on hysteria in children, by Dr. J. G. Biller, is of especial merit. Another valuable paper is on "Influence of Body on Mind," Dr. M. E. Witte. Another on "Observations Concerning Suicide," G. H. Hill, M. D. These together with the many other good papers are evidence of the work carried on by this society.

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WINTERGREEN POISONING.—A rare instance of poisoning from oil of gaultheria occurred during the past week in Bellevue Hospital, the first in the history of the institution, it is said. The drug was taken by the patient as a cure for drunkenness. The quantity consumed was not definitely made out, it being, according to the man's statement before he became unconscious, ten cents' worth. Some years ago there occurred in the wintergreen-distilling region of Pennsylvania, a similar death, in which an insurance company raised the question of intent on the part of the insured. It was shown, however, that in the process of production a watery fluid was obtained which the workmen drank with impunity, but the oil was considered dangerous and the supposition was that a mistake had been made in the two liquids, making the suicide non-intentional.—*Med. Rec.*

Current Literature.

"Three Years of Serum Therapy in Tuberculosis," by J. R. Lemen, M. D. Reprinted from the *New York Medical Journal*.

"Neuralgic Affections of the Head," by Gustavus Eliot, A. M., M. D. Reprinted from the *Boston Medical and Surgical Journal*.

"Auto-Infection and Pathogenic Physiology," by C. B. Newton, M. D. Reprinted from *The Journal of the American Medical Association*.

The *Fortnightly Review's* brilliant article on Lord Rosebery as The Disraeli of Liberalism will be reprinted entire in *The Living Age* for Feb. 18.

"Notes on the Non-Surgical Treatment of Boils, Carbuncles, and Felons," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *British Medical Journal*.

"The Milk-Supply of Cities: Can it be Improved?" by Henry O. Marcy, A. M., M. D., LL. D. Reprinted from *The Journal of the American Medical Association*.

"Abdominal Section on a Patient Suffering from Exophthalmic Goitre," by Charles P. Noble, M. D. Reprinted from the *American Gynecological and Obstetrical Journal*.

The leading feature in *The Living Age* for Feb. 11 will be a striking paper on State Socialism, by F. Nobili-Vitelleschi, translated from the leading Italian review, *Nuova Antologia*.

"Chronic Paroxysmal Headache, Commonly Called Migraine, Hemispheral, or Sick Headache," by Gustavus Eliot, A. M., M. D. Reprinted from the *New York Medical Journal*.

The Etchingham Letters, which are now running serially in *The Living Age* are attracting wide attention by their range and their humor. They treat of everything, from cycling to theology, and with a brightness that shows that the art of letter-writing is not extinct.

"The Caustic Action of Arsenic in Treating Carcinomatous Growths Accessible from the Surface of the Body," by C. W. Simmons, M. D. Reprinted from the *Hahnemannian Monthly*.

"Shall Absorbable or Non-Absorbable Ligatures and Sutures be Employed in Hysterectomy and Salpingo-oöphorectomy?" by Charles P. Noble, M. D. Reprinted from the *Medical News*.

One of the most valuable contributions to the recent literature of child study, is Professor James Sully's paper called "Dollatry" which *The Living Age* for Feb. 25, will reprint from *The Contemporary*. As the quaint title suggests, this is a partly serious and partly playful consideration of the attitude of children toward their dolls.

"WHITE DANDY:" A COMPANION TO "BLACK BEAUTY."—A new book has just been issued, entitled "White Dandy," which is one of the best stories we have read giving a Horse's own story and teaching kindness to the horse as well as to other animals. It is announced as a companion book to "Black Beauty," the noted book of which over two million copies have been sold.

This new book is written by Velma Caldwell Melville, a very competent and pleasing writer, and is issued by J. S. Ogilvie Publishing Company, 57 Rose Street, New York, and is sold for 25 cents per copy, and is also for sale by all booksellers.

The Tribune Almanac was first published in 1838 under another name. It has appeared every year except one, since that date, continuously confirming and enhancing its original claim to the confidence of the country. In recent years its size has been extended to meet the requirements of a growing population, with a greater complexity of interests, and now contains a much more varied assortment of topics. By rigid compression and expert arrangement, it yet remains compact and portable, while extraordinarily comprehensive. We observe that the 1899 number contains the Constitution of the

United States; the salient features of the Constitution of New York; the Charter of the Greater New York; a complete history of the War with Spain, including the Treaty of the Joint Commission in Paris; and the Monetary Systems of the world; full returns of the elections in the several States and Territories; electoral and popular vote for each President since the election of George Washington; the War Revenue Bill; a complete summary of Acts passed to date by the present Congress; History of the Annexation of Hawaii; and many miscellaneous topics. Send 25 cents to *The New York Tribune* and you will receive a *Tribune Almanac* for 1899.

FEBRUARY LADIES' HOME JOURNAL. The February *Ladies' Home Journal* offers more than the expected variety of literary and pictorial features. It opens with an article by Mrs. Ballington Booth, taking the reader through State prisons, pointing out the awfulness of prison life, and the hopelessness of a released prisoner's efforts to gain unaided, a place where he can get a livelihood. The story touches the heart and will attract widespread interest. Mrs. Lew Wallace writes of "The Murder of the Modern Innocents," a powerful and convincing protest against the over-education of children. "The Story of New York's Social Life" gives interesting glimpses of Gotham society, and "The Largest Ranch in the World" describes a Texas pasturage as large as two States of our Union. The three serials "The Girls of Camp Arcady," Miss Wilkins' "The Jamesons in the Country," and "The Minister of Carthage" continue with dash and a successful interest.

Two pages of the February *Journal* are worthily devoted to pictures of "The Prettiest Country Homes in America," and two more to "Inside of a Score of Gardens." Both features are the inaugural parts of a series of pictures that will be interesting and useful to every home owner or lover of Nature's work. Barton Cheyney tells boys why and where they should learn trades, and William Martin Johnson continues his "House Practical" series; "Good Furniture and Furnishing" are pictured, "Making

a Home Aquarium" is explained, and "Gowns for Unusual Figures" are shown. Helen Watterson Moody writes on "What it Means to be Engaged," Mrs. S. T. Rorer on "Food for Men and Women Over Fifty," and "Preparing and Cooking Shellfish," while every home and family interest is considered. By The Curtis Publishing Company, Philadelphia. One dollar per year; ten cents per copy.

LIPPINCOTT'S MAGAZINE FOR FEBRUARY, 1899.—The complete novel in the February issue of *Lippincott's* is "For the French Lilies," by Isabel Nixon Whitely. The action is chiefly in Italy in 1511-12, and in this remote period the author shows herself at home.

Wardon Allan Curtis tells "The Tale of the Doubtful Grandfather," and a most extraordinary tale it is, such as surely was never told before. In "A Night in Devil's Gully," Owen Hall records an Australian experience of a kind now happily rare.

Austin Bierbower, in "A Diplomatic Forecast," predicts that the leading and predominant powers will soon be England, Russia and the United States, with Germany as a bad fourth—unless she attacks and overcomes Russia before the latter has carried out her Asiatic plans.

"Cyrano de Bergerac," the play now so much talked of, is the subject of an article by Lionel Strachey. H. E. Warner inquires "Will Poetry Disappear?" and inclines to think it will.

"Lambeth Palace" is briefly described by G. F. Burnley. D. O. Kellogg writes of "James Wilson and His Times," and James M. Scovel supplies some "Recollections of Lincoln."

The poetry of the number is by Viola Roseboro, Dora Read Goodale, Clarence Urmy and Harrison S. Morris.

—:O:—

EPILEPSY.—

R Ammon. bromid., 3 vj.

Antipyrin,

Liq. potass. arsen., aa 3 j.

Aq. menth. pip., 3 vj.

M. Sig. 3 ss, in water night and morning.—*Wood, Med. Rec.*

Correspondence.

AN OLD DOCTOR'S OPINION.

Editor New England Medical Monthly:

Your kind letter of 21st inst. came to my P. O. several days since, while I was absent in an adjoining county, at the bedside of a sick relative. Your proposition to continue sending me your valued journal, is accepted as a compliment, and most highly appreciated. I am an old rebel from Joe Wheeler's district, but since the recent unpleasantness with Spain, we have all become Yankees and I now wish I had Briarean arms, long enough to embrace all Yankeedom—God bless them. I am a democrat, but heart and soul for President McKinley's expansion policy.

Yours,

J. F. Deloney,

Triana, Ala., Jan. 28, 1899.

Dr. Deloney is a very old man and retired from practice. He is also an old subscriber.—[ED.]

"AFTER OFFICE HOURS" APPRECIATED.

Editor New England Medical Monthly.

Your "After Office Hours," was a cinch. My respects to Dr. Budweiser, he is my "Me too" or I am his fellow. I wonder if the sage would let us hear from him through the MONTHLY, on the lost tribe of Israel, it is the literary fad now it seems.

Yours,

W. J. White, M. D.,

Rock Hill, S. C., Jan. 27, 1899.

—:O:—

PREVENTIVE TREATMENT OF INFLAMED BREASTS.—The *North Carolina Med. Jour.* mentions Dr. Brindeau's treatment of inflamed breasts (*Brit. Med. Jour.*). Briefly, it consists in massage, thereby expressing the pus through the mammary ducts (pus having formed) washing the diseased breast with some antiseptic solution, and in not allowing the child to nurse the inflamed gland. The poison, says Dr. Brindeau, most frequently enters from without, through the excretory ducts, rarely through the blood and lymphatics.—*St. Louis Clinique.*

Abstracts.

THE NATURE AND SIGNIFICANCE OF LEUCOCYTOSIS.—Dr. Robert Muir, in a discussion on this subject before the last annual meeting of the British Medical Association (*British Medical Journal*, September 3d), interpreting the phenomena, says: "(1) The local leucocytosis is a most important means of defence; (2) the proliferative changes in the bone marrow are the means by which the leucocytes concerned may be supplied in large numbers at any given place of need; (3) the leucocytosis in the blood is an indication, at least, that this supply is being maintained. We may also mention that the vascular arrangements in the marrow are such as, on the one hand, to permit a ready action upon its cells of chemotaxic substances circulating in the blood, and, on the other hand, to allow a free and rapid passage of the cells into the blood. It is to be noted that chemical substances must be the means by which a general leucocytosis is brought about, and therefore it is not surprising that it can be produced when there is no local inflammatory change. Whether in such a case the leucocytosis really acts as a means of defence by combining with toxins in the blood (for example, in the leucocytosis following injection of diphtheria toxin) must still be considered an open question. Another question worthy of study is whether, and if so to what extent, degenerating or broken-down tissues act as chemotaxic agents in the production of a general leucocytosis."—*Ex.*

BACTERIA OF THE VAGINA.—Williams (*Amer. Jour. of Obstetrics*) critically reviews all recent bacteriological investigations of the vaginal secretions of pregnant women; tabulates the results obtained in his own very careful study of 92 cases, and establishes the following conclusions:

1. We agree with Krönig that the vaginal secretion of pregnant women does not contain the usual pyogenic cocci, having found the staphylococcus epidermidis albus only twice in 92 cases, but never the streptococcus

pyogenes or the staphylococcus aureus or albus.

2. The discrepancy in the results of the various investigators is due to the technique by which the secretion is obtained.

3. As the vagina does not contain pyogenic cocci, auto-infection with them is impossible; and when they are found in the puerperal uterus, they have been introduced from without.

4. The gonococcus is occasionally found in the vaginal secretion, and during the puerperium may extend from the cervix into the uterus and tubes.

5. It is possible, but not yet demonstrated, in very rare instances, that the vagina may contain bacteria which may give rise to sapremia and putrefactive endometritis by auto-infection.

6. Death from puerperal infection is always due to infection from without, and is usually due to neglect of aseptic precautions on the part of the physician and nurse.

7. Puerperal infection is to be avoided by limiting vaginal examinations as much as possible and cultivating external palpation. When vaginal examinations are to be made, the external genitalia should be carefully cleansed and disinfected and the hands rendered as aseptic as if for a laparotomy. Vaginal douches are not necessary and are probably harmful.—*Ex.*

TEMPORARY CLOSURE OF CAROTID AND SUBCLAVIAN ARTERIES.—G. W. Crile (Cleveland) related a few of the more important results of an experimental research into the effects of temporary closing of the carotid and subclavian arteries. He had made 106 experiments on dogs. A series of operations was undertaken to determine whether the depression of respiration occurring in operations in the region of the brachial plexus was caused by the disturbance of the nerves or the influence of the chloroform. The results indicated that depression followed only when nerves supplying the muscles of respiration were interfered with. Another series of experiments to determine the cause of the profound shock follow-

ing blows on the lower chest or the abdomen, seemed to show that no amount of injury to the solar plexus affected the heart's action, and that this had comparatively little influence on respiration. The same was true of blows on the stomach. Blows over the heart itself produced decided fall in blood pressure, varying somewhat in different dogs, and blows over the naked heart caused still greater disturbance. Experiments with foreign bodies in the esophagus showed that those located in the lower end had comparatively little effect, while those located in the upper end cause marked choking and fall in blood pressure, as a result probably of the stimulation of the fibres of the vagus. In regard to foreign bodies in the trachea and larynx, no irritation of the mucosa below the larynx had any influence of importance, but irritation in the larynx produced a fall in blood pressure and embarrassment of respiration. This would suggest that in the removal of foreign bodies from the larynx it would be best to stimulate the heart and to produce local anesthesia of the mucosa by the use of a cocaine spray—*British Medical Journal*.

OTITIS.—The more I see of chronic suppurative inflammation of the ear, the more convinced do I become that the element of chronicity is due to lack of thoroughness in treatment. The method of procedure mapped out below will not succeed in cases where necrosis has occurred, but in all others it will reduce the duration of treatment from months and weeks to days.

The patient is placed upon the side with the affected ear up. The concha is filled with Marchand's Hydrozone, which is allowed to remain until it becomes heated by contact with the skin, when, by tilting the auricle, the fluid is poured gently into the external canal. The froth resulting from the effervescence is removed with absorbent cotton from time to time and more Hydrozone added. This is kept up until *all* bubbling ceases. The patient will hear the noise even after the effervescence ceases to be visible to the eye.

Closing the external canal by gentle pressure upon the tragus forces the fluid well into the middle ear, and in some instances will carry it through the Eustachian tube into the throat. When effervescence has ceased the canal should be dried with absorbent cotton twisted on a probe and a small amount of pulverized boracic acid insufflated.

The time necessary for the thorough cleansing of a suppurating ear will vary from a few minutes to above an hour, but if done with the proper care it does not have to be repeated in many cases. However, the patient should be seen daily and the Hydrozone used until the desired result is obtained.

Care is necessary in opening the bottle for the first time, as bits of glass may fly. Wrap a cloth about the cork and twist it out by pulling on each side successively.

In children and some adults the Hydrozone causes pain, which can be obviated by previously instilling a few drops of a warm solution of cocaine hydrochlorate. In this note it has been the intention to treat supuration of the ear rather as a symptom and from the standpoint of the general practitioner.—*Williams, The Alkaloidal Clinic*.

MORE CASES OF MATERNAL IMPRESSION.—Referring to previous publications on this subject, Dr. F. F. Chafee, of Chicago, sends us the following additional case, which came under his own personal observation: A mechanic, while working at a jointing machine, had his left hand caught and instantly lost three fingers, the middle finger and thumb alone remaining. While on his way home from the shop where the accident occurred, a woman two months pregnant met him and, although she did not then see the wounded member, the family discussed the exact extent of the wound. She was much exercised at the time and when in due course delivered of a healthy male child his left hand was found to be an exact counterpart (except in size) of the one that had so impressed the mother.

Dr. A. M. Riggs, of Russellville, Tennessee, vouches for the truth of

the following: During the year 1891, a freak, known and advertised as "the half man," appeared in one of the mining towns of East Tennessee as the central attraction of an exhibition to be given at night in the local town hall. Mrs. A., Dr. Riggs's near neighbor, attended the performance and occupied a seat near the stage. When the curtain rose the "half man" was revealed, supported only by his abnormally long arms; his huge hands, which served him as feet, tightly grasping a pole elevated several feet from the floor and extending across the stage. Mrs. A. at this time was one month pregnant and at her maturity was delivered of a child the exact counterpart of the "half man," with long, well-developed arms, large hands and legless trunk. There were, however, two rudimentary legs, very small, inclining inward, lying close to the surface of the trunk. The monstrosity lived only about an hour.

Dr. Riggs offers the following suggestion relative to these cases, which he believes to be a correct one—namely that every mother that birth-marks her child is easily susceptible to hypnotic influence—is, in other words, a "natural psychic," or hypnotic subject. Physicians, says Dr. Riggs, who have had experience in hypnotic work and who are familiar with the labors of the London Society for Psychical Research, will, he thinks, readily admit the probable correctness of his theory.—*Ex.*

THE HISTORY OF THE MASSAGE TREATMENT.—It is often impossible to determine the origin of our methods of treatment, particularly as most of them date back to the dark ages, when accuracy in detail was not a characteristic feature in medical records. Sweden is usually credited with being the place of origin of the scientific system of massage and physical exercises. This is no doubt correct as far as modern Europe is concerned, but the real originators of massage and physical exercises appear to have been the Chinese. An interesting article appeared recently in the *Deutsche medicinische Wochenschrift* in which reference was made to a book lately published by P'an

Wei, Governor of Hupeh. The author, a great authority on massage, was consulted by the late Empress of China. The Chinese legends contain many references to various systems of physical exercises, and these are associated in a curious manner with metaphysical thought. Life, according to the Chinese traditions, is entirely dependent on "air currents," which are designated as the primary *aura* of the organism. So long as the body is permeated by the "air current" it is proof against disease. The object of physical exercises is to circulate the "air current." The Chinese system is divided into three periods, each period occupying one hundred days. The first period should commence at the time of the new moon. The patient must rise at 4 A. M., and walk outside his house and take seven deep inspirations; immediately after this two youths, who have been specially trained, commence a gentle friction all over the body, starting over the cardiac area. At the time of full moon a further set of inspiratory exercises must be taken. Later on in the second period the various parts of the body are rubbed with wooden planks until the muscles are hardened. It is not until the hardening of the muscles takes place that the real physical exercises commence. Between the fifth and sixth month is the period of greatest activity; the European dumb-bell is replaced by large sacks filled with stones. In the third period the back muscles are chiefly exercised. Great benefit is said to have resulted from this system.—*British Medical Journal.*

FORENSIC RELATIONS OF GENITAL SENSIBILITY IN WOMEN.—Adolf Calmann (*Arch. fur Gynakol.*) describes a case in which a midwife was charged with procuring an abortion. She claimed to have only introduced a catheter into the bladder, but the woman bringing the charge said the instrument was introduced into the uterus. Calmann studied this question, with a view of ascertaining the degree of localizing sensibility possessed by the female genitalia. He finds that it is practically very little, the average individual being unable

to distinguish with certainty between the urethra, bladder and vagina. As between the vagina, cervix, and cavity of the uterus, there was no distinguishing power.

The writer has made numerous experiments as to the knowledge of patients regarding the size, number, and form of objects introduced into the vagina. The thickness of an object was fairly well appreciated, but there was little power in distinguishing the length. There is no tactile sense in the cervix and cavity of the uterus. Pressure sense is fairly developed in the urethra, less so in the vagina and absent from the uterus. The same was true of the temperature sense.

These observations are of great value to physicians, as charges of procuring abortion might be brought against a physician who had simply introduced a catheter into the bladder. It is evident that juries would attach great weight to the testimony of the plaintiff as to what was done at the time of the alleged criminal operation.—*Ex.*

MOVABLE KIDNEY—Yeatman Wardlow (*Columbus Med. Jour.*) expresses the opinion that floating kidney is much more frequent than was formerly supposed. It is, at least, five or six times more frequent in women than in men. This is largely due to their lax abdominal muscles, resulting from frequent pregnancies, tight clothing, corsets, etc. Any condition which changes the normal intra-abdominal pressure may lead to a floating kidney. He is convinced that the lower extremity of the organ can frequently be detected, even when the kidneys are normal. The symptoms first to attract attention are those depending upon increased tension and stretching of the nerve fibre is the hilum and vicinity. The constant dull and dragging pain in the loin of the affected side is often relieved by the recumbent position. Reflex symptoms and neurasthenia are always present in marked cases. Grave conditions are often produced by torsion of blood vessels and ureter, with consequent congestion of the kidney, or obstruction of the lumen of ureter. The latter condition pro-

duces pain which is more severe and colicky than in congestion of the kidney. Dislocations of the left kidney are frequently responsible for extreme constipation, by distorting the course of the colon. As a rule, diagnosis is easy when physical examination is carefully made. As to treatment, he found the abdominal supporter to give relief in six out of twenty-eight patients. Operative treatment is after all attended with the most satisfactory results.—*Ex.*

THE CLINICAL ASPECTS OF ACUTE PANCREATITIS.—Reynolds (*Munch. Med. Chron.*) reports a case of acute pancreatitis which resulted fatally. The main symptoms were frequent attacks of pain in and about the epigastrium and incessant vomiting. During the last attack patient developed in addition symptoms resembling those produced by atropine poisoning. Patient died suddenly about sixty hours after the beginning of the attack.—*Ex.*

FORTY CASES OF FEVER IN THE PUERPERIUM WITH BACTERIOLOGICAL EXAMINATION OF THE UTERINE CONTENTS.—J. Whitridge Williams (*American Journal of Obstetrics*, Sept., 1898), during the period of two years, has had bacteriological examinations made in every case in which the temperature exceeded 101° F. (38.3° C.) at any time during the puerperium. The cultures were taken from the interior of the uterus. For the purpose of obtaining pure cultures from the uterine lochia the method introduced by Doderlein was employed. "In every case cover slips were made and the uterine lochia were plated upon ordinary agar, acid agar and glucose agar, and blood serum or blood serum and agar slants were inoculated and anaërobic cultures made upon glucose agar by inoculating a melted tube, allowing it to solidify and then pouring the contents of a second tube upon it." With few exceptions the blood was examined in every case for malarial plasmodia. By these methods streptococci were found in eight cases; staphylococci in three cases; colon bacilli in six cases; gonococci in two

cases; anaërobic bacteria in four cases; unidentified anaërobic bacteria in three cases; bacteria in cover glass but culture sterile in four cases; diphtheria bacilli in one case; gas bacilli (*bacillus aerogenes capsulatus*) in one case; typhoid bacilli in one case; cover glass, culture and blood sterile in eleven cases; malarial plasmodia in one case." The practical value of the bacteriological examination of the uterine lochia is that by this and no other method can we arrive at a definite diagnosis, thereby excluding infection by the dangerous pyogenic bacteria. While on the other hand, the examination of the blood would indicate or exclude malaria.—*Ex.*

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Notes and Comments.

Dr. Joseph M. Mathews has resigned his professorship in the Kentucky School of Medicine to accept the chair of surgery in the Hospital College of Medicine.

CREMATE THE DEAD.—The dead of London require an annual waste of twenty-three acres of valuable ground. If, 4000 corpses are crowded into the space of one acre, the limit in the case of the most populated graveyard, and if we accept the present rate of mortality, 20 per 1,000 inhabitants, as the standard, New York, with a population of 3,500,000, would have to provide room for 70,000 corpses, and would require annually seventeen and one-half acres to bury them in. Unless the custom is changed the available room in the vicinity of all large cities will gradually be absorbed by remains of the dead.—*Medical Age.*

MEDICAL SUPERSTITIONS.—To cure a goitre, rub in oil from a lamp, especially from a lamp that has burned by a death bed.

For gout, wear a copper ring made from a coffin nail, or carry a snake skin, potatoes, chestnuts, or a tooth of a mole, or a dried toad.

For alcoholism, drown an eel in brandy and make the drunkard drink it.

For impotence, drink a glass of mother's milk.

For stomach trouble, beer poured over a red-hot horseshoe is helpful.

For hydrophobia, inscribe upon a loaf of bread, on the upper crust, the following words, and give it to man or beast, as the case may require:

"Gerum heirum Lada frium hide thyself."

To cure warts, rub the wart with a potato and feed the potato to a pig.

If a child is puny or low of vitality bore a hole in a young tree at exactly the height of the child. Drive a plug into this hole, along with some hairs of the child's head. The belief is as the tree continues to grow, so will the child.

Freckles may be removed by washing in water contained in a hollow stump three successive mornings before sunrise.—*American Medico-Surgical Bulletins.*

AN UNCONSCIOUS ACCOUCHEMENT. There is recorded in *Médecine moderne* for August 31 a case of accouchement in which the mother appears to have been unconscious of her delivery. The pains, which had been regular gradually grew fewer, and the doctor retired giving instructions that he was to be summoned about two hours later. On his return, the patient declared that the pains were strong, but the midwife assured the doctor that they were not strong enough to justify the anticipation of a speedy accouchement. The doctor caused the patient to be uncovered, when great was his astonishment to find the child lying between the mother's thighs, not breathing and motionless, the head plunged in a flood of amniotic fluid. A hot bath and alcohol friction to the spine recalled the infant to life. The child weighed somewhat under seven pounds. This recital is not without interest from a medico-legal point of view.—*N. Y. Med. Jour.*

"ABSENT TREATMENTS."—The *Massachusetts Medical Journal* is responsible for the following: A man of the Christian Science faith fractured his femur. Under Christian Science it united, of course, but there was considerable shortening. Some months later a lady called at his place of business to sell him a book.

In the course of conversation he related his experience, bemoaning the fact that the one-timed injured limb was so short that he walked with much difficulty. She expressed much sympathy, but assured him that just as Christian Science had mended the bone, just so could it lengthen it. She informed him that she understood and could give him one treatment then, and after that give him what was called "absent treatment." This she did and departed. A fortnight later the man believed his leg was really a little longer. After another week he was sure it was. A week later, still longer, and soon after it was long as the other, and later still it was longer than the uninjured limb. At last accounts the leg was getting too long; the "absent treatment" was still going on, and the whereabouts of the woman could not be ascertained.—*American Medical Compend.*

SPARTEINE.—Sparteine may be used hypodermically or externally as a local anesthetic. Geley and Testevin have employed it in a 1 to 20 aqueous solution of the sulphate in various forms of neuralgia. Of this solution 1 cubic centimeter (= 15 minims = $\frac{3}{4}$ grain of sparteine) is thrown under the skin. In some cases it answers to apply the solution to the surface, covered with cotton and a bandage.—*La Méd. Moderne.*

WE CANNOT SWALLOW IT RAW. We have received from a Western city a request for our rates for carrying the following advertisement:

"*Justice to Successful Practitioners and Students.*—Undergraduates and practitioners furnishing sworn statements from county officers, certifying they have practiced medicine successfully for years, can have degree of M. D. lawfully-conferred at home, without attendance (from legally-chartered Medical college). Students attending graduated when competent, independent of time. Graduation in dentistry same basis. For particulars address Lock Box—."

The advertiser of this proposition refers us to a prominent Western Medical Journal carrying the advertisement. *The Southern Clinic* wants business and all the money it can get honestly, but we must decline

this offer and refer it to those ethical journals now carrying Mayer's Perry Chectoral and similar reputable advertisements. You need not fear, "Lock Box —," for there are lots of excellent journals that hold different views from ours. We might try it if it was sugar-coated, but as long as we are able to subsist on "corn pone" we will not take it "raw." *Southern Clinic.*

CLEANING THE HANDS.—Ahlfeld (*Deutsche Med. Woch. in Phila. Poly.*) after an elaborate series of investigations of the comparative value of various antiseptics and methods of using them in cleaning the hands, makes the following deductions: For simple antiseptic preparation of the hands the following rule is of value: After cutting, polishing and cleaning the finger-nails for at least three minutes in very hot water with soap and brush, the hands should be rinsed with plain water, then immersed and scrubbed hard in a 96 per cent. solution of alcohol. As an aid in washing the hands, he recommends that a flannel rag be used. Care should be taken to work the alcohol well under the finger-nails. In cases where extreme care should be used in the cleansing of the hands, the hand and arm should be scrubbed with soap and warm water for at least five minutes, cleaning the nails carefully and then immersing and scrubbing in a 96 per cent. solution of alcohol.—*Ex.*

"PIN"-WORMS.—Give by the mouth every day before breakfast, for three days, three-fourths of a grain of santonin and one and a half grains of calomel; also every evening, for the same number of days, insert a little of the following within the sphincter: glycerite of starch two parts and mercurial ointment one part.—*Jour. de Méd. de Paris.*

VULVITIS.—

R Liqueoris plumbi subacetatis,
3 j.

Tinct. hyoscyami, 3 ij.

Aq. camphoræ, q. s. ad $\frac{3}{4}$ viij.

M. et ft. lotio. Sig. Apply constantly, tepid, with saturated cloth.—*Waring, The Atlanta Med. and Surg. Jour.*

BELLEVUE HOSPITAL AND THE NEW MEDICAL SCHOOL.—A situation that was probably not expected by the authorities of the New York University is that of the present relations of one of the divisions—the former university division—of the medical staff of Bellevue Hospital. The staff, as is well known, has of late consisted of four divisions, representing respectively the profession at large, the medical school of Columbia University, the medical school of the New York University, and the Bellevue Medical College, and, as regards the collegiate divisions, there has been a rule in force that when a man gave up his school connection he ceased to be a member of the staff. It seems, however, that this rule has been rescinded, and the result of this is, as we understand it, that the New York University, instead of being free to nominate new members of the hospital staff to succeed the gentlemen who lately resigned from its medical faculty, is without representation on the hospital staff and probably unable to obtain such representation, while the new Cornell school gets a footing in the hospital at once *N. Y. Med. Record.*

JEQUIRITY IN OZENA.—Jequirity proved effective in a number of cases observed by Dr. C. Uriarte that had resisted all other treatment. The after effects vary with the individual and are transient, never serious. He uses it in a powder or salve or in a 10 per cent. solution.—*Jour. Amer. Med. Asso.*

Some time ago we called attention to the course of free clinical lectures on Diseases of the Skin which Dr. Bulkley was giving on Wednesday afternoons, at 4:15, in the Out Patient Department of the new building of the New York Skin and Cancer Hospital. These lectures, which, as far as we know, are the only free lectures and demonstrations of the kind in this country to physicians, have been very well attended, and afford an excellent opportunity for practical acquaintance with diseases of the skin and their treatment. Dr. Bulkley could not come to Danbury on Wednesday to address the Danbury Medical Society, as he was not

willing to miss one of the lectures, which will be continued each Wednesday for some time to come.

LONG DISTANCE DIAGNOSIS.—Brilliant as is the accomplishment of making a diagnosis across the room, or at first glance, the process is not always a safe one. According to the *Lyon Médicale*, Professor Renaut recently had occasion to pay a visit to a pharmacist, on a matter of substitution in a prescription the professor had written, and said he would like to see him privately. The druggist invited his visitor, who was unknown to him, to enter his private office, and when closeted said to him with a smile: "I know why you have come to consult me; it is because of a *chaudepisse* which has gone down into the testicle. I saw it at once by the way you got out of your carriage."—*Med. Record.*

WHAT DID THE RECTOR MEAN? For the sake of the rector, who is young and artless, let his name be unknown. But the story is true and it happened last week, and each woman is busy with its narration. There is an organization in the church; what its uses are only the members know, but it is called "The Little Mothers of the Church." Now, this rector was giving out a notice about it the other Sunday, and how a woman could join it, etc. And then he made this announcement, which created a flutter and a gasp: "Any lady wishing to become a Little Mother can do so by calling on the rector any Friday, in his study attached to the church." And a murmuring wave, like a sudden wind in the forest, went over that congregation.—*San Francisco News Letter.*

There is a Russian Jew named Morris Fox, living in the East end of London, who has abstained for the last twenty years from all solid food, his sole daily diet consisting of six pints of milk, three pints of beer, and one-half pound of Demarara sugar. He is now over forty—the most healthy, intelligent and wide-awake person in his quarter. At the age of seventeen, it appears, he caught some lingering fever, "which shattered his constitution and entire-

ly destroyed his digestive organs." He took many kinds of treatment in hospitals and from physicians, some of them of celebrity, but without effect. Finally he traveled to Konigsberg, where the doctors decided that he must live on sugar, milk and beer. On this régime he soon regained normal health.—*Med. Times.*

ETHER FOLLOWED BY CHLOROFORM. Dr. Hewitt (*The Hospital*, Vol. xxiii, p. 373, 1898, *Amer. Med. Surg. Bull.*) points out that deaths taking place in the early stage are usually due primarily to rigidity, struggling and "holding the breath;" secondarily, to a considerable quantity of the anesthetic being taken in during the succeeding respirations, so that the heart becomes paralyzed by the chloroform carried directly to it. But by giving ether and chloroform in succession the stage of rigidity and

Therapeutic Notes.

THE "OTOSCOPE" ILLUSTRATED here is one of the most useful instruments ever placed on the market. It is used in connection with the Dow Portable Electric Assistant (see advertisement, page xx). The small electric lamp is placed in it in such a manner that the rays are thrown directly through the tip, and does not interfere with the vision in any way; the operator looking through a magnifying lens which enlarges the object being examined, notably the ear and nose, can obtain a clear sight, thereby being able to detect any trouble and treat the same intelligently. It is a necessary adjunct to this case, and is something that an up-to-date physician would not be without after once making an examination with it.



excitement, which is the dangerous stage under chloroform is passed over under the stimulating effects of ether. Fatalities during this stage are practically unknown under ether. Having secured a proper degree of anesthesia, chloroform may be substituted. Dr. Hewitt says that he has adopted this principle for several years, with splendid results. Should ether cause cough, embarrassed breathing, or the secretion of much mucus, or should the operation be likely to be a protracted one, a change to chloroform is certainly advisable. Anesthesia, however, should not be too deep when the change is made, or too much chloroform may be absorbed by the rapid respiration and brisk circulation brought about by the ether. Generally speaking, the conjunctival reflex should be present when the change is effected.—*Med. Times.*

And this is only one of the attachments. To describe the Assistant complete would require the use of from twelve to fifteen cuts, for which, of course, we haven't room here; but if you will write to the Company, and mention the NEW ENGLAND MEDICAL MONTHLY, they will take pleasure in fully explaining the case to you and in sending you their illustrated catalogue. (See page xx.)

Besides the Otoscope, however, there is one other attachment to which we particularly direct your attention, namely, the *Electric Head Light*. This attaches to the Assistant, and can be focused so as to concentrate or diffuse the rays of light. It has been pronounced by operators in rectal surgery, aurists, gynecologists and eminent specialists in other fields as greatly in advance of the present head mirror. Send for the catalogue.

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TEMPERANCE FROM A PHYSICIAN'S STANDPOINT.

BY WILLIAM F. BARCLAY, A. M., M. D.,
PITTSBURGH, PA.

SACRED and profane history note the evidence of the effects of inordinate use of alcoholic liquors upon the human system, and the condition especially termed drunkenness. The fermentation of the various products of grain and fruit and their distillation produces the different forms of alcoholic stimulants, which are generally used as beverages. It would seem from careful inquiry that no one naturally cares for the taste of the different forms of alcoholic liquors and that they are to the uneducated palate distasteful and disgusting. A careful inquiry of persons addicted to the inordinate use of liquors has as yet failed to even ascertain a single reason for the use and formation of the habit which has proven so detrimental to the health and happiness of so many human beings. In the care and treatment of patients who suffered from excess in drinking liquors no one has as yet given the writer even a hint as to the abuse of the body by the excessive use of liquor. The only answer as yet received from these patients has been "I do not know why I drink." It seems that there is an entire want of self-control and an utter disgust and remorse in the abasement that follows the debauch of all persons who are addicted to the inordinate use of liquor. Drinking is a habit which has to be gradually acquired, as no one naturally drinks to excess. One of the most interesting subjects in sanitary science is the drink habit in men and women of all classes. I am

not entirely satisfied that more men than women drink inordinately, but believe that the number of women preponderates. A careful study of this question for almost one-third of a century has been one of the most complex subjects in medical science, and I honestly and sincerely believe that there is less known of the real cause of this unfortunate habit than any other question in medical science which presents itself for serious scientific investigation. Almost all persons, who have acquired the drink habit directly or indirectly, apply to physicians for help and relief, and almost invariably fail to either receive sympathy or advice from the physician. I admit that there is a general ignorance on the part of medical men; especially is this true of those physicians of higher attainment in the profession of medicine. Inquiry of forty-two college professors in medical schools elicited the fact that not one of them had ever given the question careful thought or consideration. In truth they had as far as possible avoided attendance upon persons who suffered from the effects of excessive use of alcoholic liquors. It was affirmed by all of whom inquiry was made that many patients had applied to them for care and treatment, but the inquirers had been dismissed without treatment except the kindly admonition to leave off drinking else the habit would ultimately destroy the life of the patient. It has seemed to me that the attitude of the profession of medicine on this question is inhuman, irrational and unscientific, and to myself in common with my professional colleagues I express a regret of want of interest in the study and alleviation of a physical evil or malady that daily destroys thousands of human lives, as well as demoralizes society more than

all other causes combined. Moralists and religionists have kept up an earnest and continual warfare against the evil of drunkenness, but I am sorry to state without much apparent result. Statistical reports show that there are more drinkers and drunkards to-day than there were one year ago, and I believe that the observations of physicians will confirm this statement. The consumption of liquors is largely on the increase which is confirmed by revenue statistical reports. Each year in the past decade the consumption of liquors has been largely on the increase in the United States. The medical profession has a scientific interest as well as a general moral consideration for the welfare of humanity. Seldom a day passes by that the general practitioner of medicine is not confronted by the evidence of the effects of over indulgence in the use of liquor in some form in the practice of his profession.

Perhaps some of the evidences of the effects of the use of liquor is more apparent in the anomalous defects in organization of the rising generation and are overlooked in the real causation of these organic defects in the co-ordination of physical life.

The study of nervous phenomena in life caused by defects in organization in offspring of parents who are inebriates would constitute a study of more than ordinary interest in moral and physical economy. It is apparent that herein is the secret of inebriety in the physical defects in organization which are the results of conditions of progenitors at the time of procreation. A recent contribution to medical literature suggested a new theory as to causation of inebriety termed Hydration which is not less ingenuous than interesting from scientific consideration. It would seem strange that the thousands of educated scientific men and women who have suffered from the effects of drunkenness, have not suggested from personal experience something that would enable the student to determine that which creates the insatiable appetite for stimulants, and a remedy or remedies that would subvert the desire for the effects of liquors. Intemperance is a crime and is so

considered by the laws which govern society and the penalties attached to the offences are a considerable part of the criminal calendars in our courts of justice. I have been unable to find a single individual who could describe the insatiable appetite which is said to be an ungovernable mental influence which nothing in the ordinary form of moral or physical persuasion can control. All who have described the impulse declare that nothing but alcoholic drink can satiate the ungovernable appetite, and that the abuse of the use of liquor to the extent of toleration is alone sufficient to lull the unfortunate subject into a state of drunken insensibility. Nothing in the form of food or medicine yet known alleviates the ungovernable appetite for stimulants in man. In many instances periodic drinkers have implored physicians and friends in their attempts to avoid intoxication even voluntarily seeking the control of officials in hospitals and prisons. To turn away from and neglect the unfortunate victim of the periodic habit is certainly inhuman or in any way to turn aside those who ask assistance is heartless and cruel. No one should disparage the least effort set out to assist in any way those who have once formed the habit. The dearest ties have little influence in the control of those persons who have once formed the habit. I have at my command literature, moral, scientific and statistical, yet reference to it seems to render little or no assistance in this most interesting vital question. Numberless treatises have been written and many theories set out as to the causation and treatment of drunkenness but as yet nothing has afforded substantial relief to the unfortunate inebriates. I do not wish to be pessimistic or skeptical in my views but desire to encourage all reasonable and well-directed efforts to assist and relieve all who cannot control themselves in the use of intoxicating liquors. Habitual, periodic and other forms of drunkenness are considered and have little practical significance in the consideration of the ultimate results of the inordinate use of liquor. Moral, religious and persuasive means have been used from time immemorial with

considerable effects in the control of inebriates. Medical treatment with voluntary and involuntary restraint has been used in the treatment of inebriates with the most gratifying results. It would seem that the only rational course of treatment is in the voluntary or involuntary control of inebriates with suitable medical treatment. The most intelligent part of inebriates constantly when overcome by a desire to drink seek the aid of hospitals and prisons for care, restraint and medical treatment. A large number of inebriates voluntarily leave off the use of alcoholic stimulants although the appetite for stimulants remains and it is a constant struggle on the part of the subject to avoid the return to the habit of drink. It is affirmed by most persons who have acquired the taste for stimulants that the appetite still remains and that it is possible to abstain from the use of liquor by avoidance of all means of temptation. The hereditary transmissibility of the tendency to use intoxicating drink is established beyond reasonable doubt although there are exceptions which seem to be a positive proof of the assertion that "exceptions prove the rule." The etiology of the physical condition that creates the desire for drink is the most difficult of scientific problems and it seems to the writer to be a neuroses or nervous condition simulating a mania, although many believe it is of dietary origin, and that it has its causation in a disordered condition of the nutritive system of the body. The peculiar mania is one of degree, as no two persons are similarly affected.

The effects of over-use of alcoholic liquors upon the physical organization are dissimilar and the manifestation of over-stimulation of the vital powers are observed in different forms of pathological manifestations of the mental and physical disease conditions. The pathological conditions of the body superinduced by the continued use of liquors are manifest in the different tissues of the body, in the liver, kidneys and the various glands of the emunctory system of the body. The impairment of the nervous system of the body is apparent in a lessened power of concentration in mental action and a

want of equilibrate mental co-ordination. In a study of brilliant intellects it has been observed that power of intellect is weakened and mental force dissipated by the use of alcoholic liquors. Some of the most brilliant intellects have seemed not to be impaired by the use of stimulants for a considerable length of time, yet a careful study of the work accomplished has demonstrated that there is want of cohesion and co-ordination in the results of mental efforts that clearly demonstrate that there is a lessened power of intellectual force. The impairment of moral force in the cohesion of a continued course of moral conduct is always apparent in the lives of persons addicted to the use of alcohol.

There is nothing more forcibly demonstrated in living economy than the force of want of confidence on the part of the sober, industrious and honest in those persons known to indulge in the use of alcoholic liquors. It is not of unusual occurrence to observe a want of confidence and distrust in persons of good moral standing which is ultimately traced to the secret use of liquor.

The power of observation has demonstrated that persons accustomed to the inordinate use of alcoholic liquors cannot be trusted, on the contrary, they are invariably unreliable. There has been a constant warfare against the inordinate use of alcoholic liquors from time immemorial and it can be fairly stated that there is more liquor used at the present time than at any former period of the world's history. A reference to revenue statistical reports confirms the truth of the alarming use of alcoholic liquors by all classes. Mortuary statistical reports show the extent to which alcoholic liquors enter into the cause of deaths to an extent that is most alarming, although these reports are only an approximation of the extent to which the use of stimulants is the real cause of death. There is a disposition on the part of those interested to conceal the real cause of death, and the facts in many instances are suppressed in the death reports. It would seem that a continued consideration of the cause and effects of the use of alcoholic liquors is not of serious interest, but rather

a serious consideration of some of the means that may be used to prevent the inordinate use of stimulants, and the help that may be rationally afforded to the unfortunate inebriate. To drink or not to drink is a question of vital import to every human being and the attitude of every one interested in the welfare of humanity on this important vital question is one of the most serious problems in moral and civil economy.

Moral suasion is as a rule of little avail when the ungovernable impulse controls the will of the individual who has formed the drink habit, and it would seem that the power of the most sacred influences have little control over the determined inebriate. There are certain specified forms of drunkenness, the habitual, periodic and other forms have been described, but there is no characteristic difference in the physical and mental effects of the use of liquors on the economy of those who inordinately use liquor. Scientific opinion varies as to the effects of the use of alcohol as a medicine and its value as a stimulant when used temporarily. Many believe that alcohol should never be used as a medicine and that it has no value when used as a stimulant, but that it is always injurious. As a physician for almost one-third of a century, my best judgment is that alcohol has a very limited place in therapeutics and that it could be left out of the list of medicinal agents without detriment in the physician's armamentarium. Social drinking is the usual way in which the greater part of liquors are consumed, and is at all times a source of danger to persons who are addicted to dram drinking. It is probable that more persons acquire the habit of drinking in a social way than in any other manner. The use of liquor in homes is getting each day to be more and more of a custom in families. This observation can be verified by observing the immense traffic in liquors by wholesale dealers, who supply families with regularity. By the use of liquors in the home, the youth and even the children acquire an appetite for liquors and it is not an unusual sight to see even children intoxicated.

The toleration of the use of alcohol in most instances is the ability of the individual to use and not abuse drink, but there is at all times danger of reaching the point where a temperate use of alcohol ends and the abuse begins. Dr. Johnson said "I can be abstemious, but temperate never." This expression is doubtless the experience of a very large number, who drink to excess. The interest which is attached to the query as to why men drink inordinately is one that is past finding out, as no one has as yet given me a rational reason for over-indulgence in the use of alcoholic liquors. Certain mental and physical phenomena characteristically foretell the incipient or prodromic stage of excess in drinking, and many persons ask assistance in warding off debauch. There is a moral and physical dread of the effects of a drunken debauch which is to the drunkard a period of most painful and dreadful expectation, and there is the consequent abasement and remorse with the resolution not to repeat the dreadful experience of a drunken debauch. The formation of moral resolution is accompanied with the determination to seek better associations and in future time to totally abstain from the use of intoxicants. The total abstainer is at all times safely in the temperance column of society in its front rank.

I believe that intemperance is a disease condition of nervous origin, and that it is amenable to treatment, moral and medicinal and that many inebriates can be cured by rational treatment. The value of moral suasion and the abstinence enforced has in some instances afforded valuable relief to inebriates. Treatment directed to the nervous system has in my own experience in the treatment of inebriates afforded the greatest relief. It has been the practice of many to give nauseants to inebriates but this course of treatment is not of lasting value.

I would not be pessimistic, but would hail all evidence that shows to any degree good results from any methods used in the care and treatment of inebriates, but I am to a large extent skeptical as to statistical

reports which are in contradistinction to revenue reports as to the manufacture and sale of liquors. The determination of nervous force inordinately to any particular function produces inordinate activity and lessens co-ordination of equilibrate nervous energy. It would seem that the determination of nervous force in the undue appetite for stimulants is one of degree, and it increases until it becomes a mania. Dipsomania is a form of insanity, as in other manias is of different degrees, which is a deviation from a normal condition. I have perhaps set out as clearly as I can that which is the rational conclusion in a long study of the drink habit, or more clearly, the disease called intemperance.

Does this conclusion fairly establish a rational answer in the practical demonstration in the answer set out by intelligent treatment? It usually requires a considerable length of time to become an habitual drunkard and treatment must be of continued character to afford permanent relief. It has been affirmed that the taste for stimulants has been acquired by the treatment given by physicians in prescribing liquors for their patients in disease. My own observations do not substantiate the conclusion, but on the contrary I have only known one person who acquired the habit from the use of liquor prescribed by physicians.

I appreciate the benefit of being permitted to discuss this question in presence of ministers of the gospel, as no doubt discussion will bring out much that will be of importance to each one in the study of this most important moral and vital question.

1620 FIFTH AVE.

MASSAGE IN RECENT FRACTURES.—Bennett advocates in the *Lancet* the employment of massage in recent fracture. He says that the movement of the fragments is so small that it may be disregarded; that massage obviates subsequent pain and stiffness and decreases muscular spasm. The subsequent atrophy is according to him, much lessened by this procedure.—*Ex.*

ON PHYSICAL EDUCATION.

BY C. P. ROBBINS, M. D.,
WINONA, MINN.

Member Winona County Medical Society; Southern Minn. Medical Society; State Medical Society; American Medical Assn.; Late Assistant Surgeon, P. B.; N. H. D. V. S., etc., etc.

ARTICLE III, "BATHING."

"Healing are the watery billows, water cools the fevers' glow,
Healing against every plague, health to thee brings waters' flow."

BATHING is as old as the history of mankind since the time when Adam and Eve, in their pristine bathing costumes, plunged into the cooling waters of Eden. The Hindoos and Chinese were the first to write of the ablutions of man. To-day we admire the magnificent structures that were built many thousand years ago, by the old Egyptians, for the purpose of pure water, for drinking and bathing. As bathing in its broader sense has come to mean an internal as well as external use, which is so happily expressed by Dr. Austin Flint, Sr., who says, "Plenty of water, plenty of water outside and in, for health."

Following the Egyptians came the Greeks, expounding the gospel of cleanliness, so wonderfully told by the great father of medicine, Hippocrates. It was left to the Romans, however, for "Baths" to attain their greater elaboration, Asclepiades, Cormis of Marseilles, Agathimus, Celsus, Musa and Oretaes all championed its cause. The public baths in Rome were divided into many departments, which go to show how important and necessary they were to living. As the bather entered the establishment, he came to a disrobing apartment, then passed to a hot air chamber, then to another of higher temperature, then to a hall for massage, then to another room to receive ablutions of warm water, and finally to another chamber to be rubbed with oils and perfumes. Then came more expensive apartments, if desired.

During the early part of the Christian era, the Arabians, among whom Avicenna, recommended the baths as a therapeutic and hygienic means. In the 15th century we find Michael Savonarola, Mengo, Biaanchelli and Cristoforo Barzizi revise the subject

of bathing. Then came Van Helmet, Blair, Huxam, Floyer, advocating it. In the 18th century, Frederic Hoffman wrote a book on its utility. Then Halms, Wright and Barch, each aiding its cause. Thus runs the long pedigree, distinguished enough to have it fare better in our generation.

The use of water for bathing purposes in its popular sense has come to mean ablutions externally, but it should include its internal use as well. First we will consider the use of water externally, from a physiologic and hygienic standpoint, in regard to bathing. Before describing the different forms of baths, their effects, uses and results, it will be well to consider the action of heat and cold on the organism. Externally, a temperature of 104° F. dilates the cutaneous blood vessels, thus reddening the skin and increasing cutaneous sensibility. A higher temperature of 110° F. to 120° F. abolishes cutaneous sensibility, causing spasmodic constriction of the blood vessels, with pallor and wrinkling of the skin.

Higher temperatures are tolerated when the heat is dry, causing increased action of the heart and accelerated pulse beat. A higher moist heat increases the number of respirations, while dry heat decreases the same. Moderate heat diminishes nerve sensibility, while high heat produces nerve excitation. Moderate warm temperature favors muscular work while high temperature renders the muscles incapable of action. Moist heat increases the secretion of sweat. Cold produces a painful sensation on the skin, and later anesthesia, being due to spasmodic constriction of the capillaries, with anemia of the integument.

Cold diminishes muscular action, moderate cold stimulates the brain and favors intellectual work. Cold diminishes perspiration. Dry cold is more stimulating than moist cold.

Baths in relation to hot, tepid and cold, whether complete or incomplete, produce marked effects upon the system. To know the good effects of the cold bath, in a hygienic sense, is to know its physiological action upon the skin, through which it acts.

The skin histologically consists of epidermis, cutis-vera, subcutaneous fatty tissue, sweat glands, blood vessels and nerve terminals. The blood vessels ramify into the papilla and in the subcutaneous tissues around the sweat glands and hair follicles. The nerves terminate between the cells of the epidermis in fine fibrils. Physiologically, the skin is a mechanical protection of the internal organs of the body. It is an eliminative organ, and is a great regulator of body heat in man. The skin is the telegraphic instrument which sends messages of warning and command to all the centers of the complex nervous mechanism of the body. Such are its functioning properties, and it is only a step farther to know the action of the cold bath upon the system. The respirations become regular and deeper after thorough application, and the deepening and strengthening of the respiration, counteracts upon the circulation, helping and invigorating it, thus demonstrating the inter-dependence of action of the physiologic functions of the system. The stimulation to the nervous system has the effect of tone, and the whole economy feels the benefit, secretory, excretory, circulatory, respiratory, motor, all.

The pivot point of all good effects to be derived from the cold bath is that there must be a good cutaneous circulation during the same. The cold morning bath, in health, is a good thing, if properly and judiciously performed. For a beginning it is well to stand in about eight inches of warm water and sponge off with water gradually cooled until one can with comfort take a plunge bath of 80° to 75° for the first few days. And then to gradually lower the temperature to 60° or 50° F. which is easily done, producing a healthy reaction and glow. It accelerates the blood flow, raises blood pressure, thus flushing the eliminative organs, and starting them in their day's work, fresh and invigorated. Just as in exercise, we voluntarily exercise nerves and muscles by gymnastics, so are the voluntary muscles of the cutaneous vascular system exercised by the gymnastics of contraction and dilatation. The power of good it

produces in this way is effective in the superlative degree.

The tepid water bath, temperature between 80° and 96° F., with saponification, removes the waste particles from the body surface, opens the pores to action, making the skin soft and supple to carry on the functions better. It softens the integument and produces tone and vigor. It is this bath that hinges the condition of personal cleanliness, on which so much depends. When we stop to consider the twenty-eight miles of tubing that ought to be kept free from *débris* and the millions of pores that ought to be kept open, we can see at once the importance of such ablutions *pro re nata*. It is our own fault if we do not take the proper care of our body surface. The foreign matter which is removed, places the skin in a vigorous state to carry on its functions.

The hot bath means the emersion of the body in water at a temperature above 96° F. The peripheral nerves are stimulated, raising cardiac circulation and increasing pulse beat. The respirations are increased in number and amplitude; the skin becomes red, the veins of the head become turgid and there is perspiration.

In lassitude and muscular fatigue from physical or mental labor the hot water exercises a rapid and salutary influence. The secretory organs decrease in action and susceptibility to cold increases. And by decreasing the calibre of the blood vessels of the *pia mater* produces drowsiness and invites sleep.

Second as to the use of water internally from a hygienic and physiologic standpoint. The local effects of cold water internally in the morning. Before taking food on a healthy stomach, stimulates the muscular coat of the stomach to contraction, tonicizes the blood vessels by its sudden chill, and passes directly into the intestines. It washes the mucus from the surface of said organ and retains *débris* of food that happens to remain after digestion, thus preparing the organ for another action. In the intestinal canal, a similar influence takes place, increasing peristalsis and evacuation of alvine matter. Its general effect stimulates

the solar plexus to greater action, thus accelerating heart beats, raises arterial tension, favoring and giving greater vigor to respiratory action, greater activity to the secretory glands. A greater absorption of water is taken into the blood current, which serves to dissolve and remove waste particles in the tissues, thus affording the degree of dilution necessary of the blood the most advantageous chemical action in building up tissue and liberating energy.

Hot water in the morning before taking food on a healthy stomach dilates the blood vessels still more and may prove the opposite of beneficial. But on a stomach that has not been completely emptied, it washes the undigested food from the interstices, and pockets, and thus favors their elimination. Abundant amount of mucus from indigestion is washed away in the same manner. In the aged, the hot water seems more beneficial than the cold as there is less heat produced in the body, the addition of heat to the water being very beneficial.

After considering the physiological and hygienic effects of water external by the cold, warm and hot baths, and with water internal hot and cold to derive the desired results, we must use them persistently and rationally. If we wish to have the body in its highest state of health, we must have system and order.

For a perfect system of hygiene we must train the body, the intellect and the moral faculties in a perfect and balanced order. When we look around us and consider the conditions of the world, the abundance of life, its appalling waste, the gifts of the mind, its perversions and alienations and when we notice the conditions of the human race and consider what it might have been and what it is, its marvelous endowments and power, its terrible sufferings and abasements, its capacity of happiness and its cup of sorrow, we must be gifted with sublime endurance and undying faith, to know out of this chaos order can come, and out of this suffering, happiness and health. In the midst of all our weakness and errors we are gaining knowledge and that knowledge tells us the fate of man is in his own hands.

It is undoubtedly true we can choose between health and disease, not perhaps individually, as the sins of our fathers may be visited upon us or the custom of our life and chain of our civilization and social customs may gall us. But as a race, man holds his own destiny and can choose between health and disease. Especially is this true in regard to hygiene measures for personal health. The first measure to be recognized is physical cleanliness. The notion of what cleanliness means is never the same to every body because the effect of the contrary is not always alike, consequently the conception of pure and impure is a matter of individual agreement.

As regard to cleanliness the application of general bathing to a particular case constitutes individual management. Our aim must be to make the measures sufficiently elastic, and yet precise enough to meet every possible case. It is sufficient if they contain principles and precepts.

Bathing is one of the most valuable factors to health. We know saponified water externally applied to the body removes the film of nitrogenous debris, bacteria and oleogenous material, producing a healthy, active skin, invigorating and vivifying its functions.

We know purified water internally washes the mucous surface of the alimentary tract of its hyper-secretion of mucus and undigested food, giving tone to its action, increasing alimentation, peristalsis and osmoses.

And its general effect to give muscular tone to the muscular system. Bathing gives vigor by promoting the action of the vital organs, by scientific adaption of its principle. It preserves the balance between the energies that waste and those that supply it. It secures a perfect poise by strengthening the nerve centers and a healthy nerve tone by preserving its methods with precision and exactness.

It strengthens the nerve centers and harmonizes the nerve force. It secures an equilibrium and muscular sense that gives dignity and repose. Its tendency is to make a strong individuality pervade all his presence; unity and grace control all move-

ments; and are the most potent factors in suggesting that governing moral and intellectual power. A radiant personality dominating all action and impart individuality, style, taste and grace. And with these results attained, growth will be more perfect, decay less rapid, life more vigorous and death more remote.

CHLOROSIS.

BY DR. S. ASCHER.
HAMBURG, GERMANY.

(TRANSLATED.)

ALTHOUGH chlorosis in its typical form, which occurs especially in females at the time of puberty, is generally amenable to medical treatment, there are cases in which all our efforts to effect a cure are unattended with successful results. We are inclined in such cases to call to mind the explanation given by Virchow, who assumes that chlorosis frequently depends upon a congenital narrowing of the arteries; yet this explanation is of little aid to the practical physician. If we remember that the action of iron—*our panacea in chlorosis*—is yet a mooted question, and that doubt still exists as to whether iron is capable of absorption by the stomach or intestines, it is natural that we should welcome preparations which promise to give better results than those in previous use.

It is well known that in the hæmoglobin of the red corpuscles *manganese* is constantly found in connection with iron. Opinions have always been divided as to the significance of manganese in the blood, as regards the question whether manganese is really a constant constituent of hæmoglobin or an occasional one. We know that the function of the red corpuscles to take up oxygen is chiefly attributable to the presence of iron, but an active part in this direction has also been ascribed to *manganese*. While in chloride of iron one-third of the chlorine is active, this property belongs to a still greater extent to manganese chloride, a combination of chlorine and manganese corresponding to that of chlorine and iron. Iron chloride is a much more stable combination

than manganese chloride, which decomposes even at ordinary temperatures and gives off one-half of its chlorine; it is, therefore, *quantitatively more active than iron*. Manganese as a constituent of the blood exerts a *stronger polarising effect upon the oxygen* and gives off the latter more readily than iron.

Manganese is, therefore, a more powerful oxidizing agent than iron, and, absorbed into the body, will exert an energetic assimilative action.

Joh. Kugler, in 1838, was the first to recommend the *manganese salts* in scrofulosis. He made the observation that persons who handled manganese oxide in a chlorine bleachery enjoyed an immunity from diseases of the skin, bones and glands. In 1844 Hannan found a diminution of *manganese* in scrofulosis, and to a still greater extent in anæmia and chlorosis. In chlorosis he found that the quantity of iron was sometimes chiefly diminished and sometimes that of manganese. *He therefore distinguished chlorosis from lack of iron and manganese.*

Although this schematic classification cannot be accepted, other investigators of more recent times have established a connection between chlorosis and a deficiency of the quantity of *manganese* in the hæmoglobin.

In 1852 Petrequin recommended *manganese* in combination with iron. He maintained that in all cases in which iron is indicated but proves ineffective *there is a deficiency of manganese in the blood*. Among recent authors Rühle, of Bonn, has warmly recommended the *combination of manganese with iron* in the treatment of chlorosis, and lately *manganese* has been employed with much success for amenorrhœa in young persons between the ages of eighteen and twenty years.

Notwithstanding these high commendations from various sources, *manganese* was not generally adopted in the treatment of chlorosis, and in cases when iron failed to act resort was had to purely dietetic measures. *The reason for this was that no preparation existed in which iron was combined with manganese in a readily absorbable form.* Such a prepa-

ration, however, is Gude's pepto-mangan, and the results obtained from its use by myself and others are *exceedingly promising*.

Gude's pepto-mangan has been tried by me and a few colleagues in various diseases associated with a depreciated condition of the blood, altogether in *eighty cases*, and in the following I will give a few exact data concerning the observation thus far made by us.

In the simple chlorosis of females during the period of puberty we have employed Gude's pepto-mangan in about thirty cases with uniformly good results. The remedy was always well borne, digestive disturbances were never observed, the marked symptoms of headache, vertigo, palpitation of the heart, and loss of appetite were improved within a few weeks. The bodily weight increased one-half kilogramme (about one pound). Among the histories of cases at hand the following appear especially noteworthy.

Miss Sched, aged 22, suffered from œdema of the legs, general weakness, marked anæmia; menses absent for several years. Prescribed rest, vigorous diet, massage, and Gude's pepto-mangan three times daily. After six weeks' treatment œdema disappeared, menses returned, patient felt better, had better color. Four weeks later menses became abundant, although the pepto-mangan was no longer employed.

Miss R., aged 28, seamstress, marked anæmia, nervous dyspepsia, fluor albus. Besides massage, rest, etc., Gude's pepto-mangan, one teaspoonful thrice daily. After three weeks, fluor disappeared, menstruation more abundant, patient's condition perceptibly improved. The disagreeable backache had ceased, appetite and condition of the bowels normal.

Miss Clara F., aged 25, weight 52.5 kilogrammes (about 110 pounds); great disturbance of nutrition and anæmia; had suffered for five years from amenorrhœa, nervous dyspepsia, general neurasthenia, and nervousness; complexion sallow owing to constipation. Gude's pepto-mangan administered (altogether 1,100 grammes, 36 to 37 ounces). Result very favorable; weight increased one-half kilogramme (about one

pound) every week, appearance excellent, general condition much improved; constipation relieved by extract frangul. fluid. During the eighth week menses returned; headache and stomach troubles have disappeared; patient has great hopes of perfect restoration to health.

This preparation also proved very serviceable in cases of anæmia associated with more or less marked scrofulosis. The abscesses of the skin healed, eczema of undoubted scrofulous character disappeared. The following case is characteristic:

Margaret G., aged 12, a weak, anæmic, and scrofulous girl, had suffered repeatedly from tonsillitis, coryza, anorexia, glandular swellings, and had a pale and sickly appearance. Prescribed for a period of six months three baths containing Kreuznach mother-lye thrice weekly, and Gude's pepto-mangan one teaspoonful thrice daily. In all 1,000 grammes (two pounds) of the liquor were used. The girl now looks well, healthy complexion, red cheeks and lips, appetite good, swelling of glands has almost entirely disappeared.

I have further employed the Gude's pepto-mangan in that form of anæmia which is found in young women as a complication of uterine trouble, or as consequence of profuse loss of blood from repeated abortions or childbirths. The effect was always uniformly good. The patients, who belonged for the most part to the working class, after three to four weeks' use of the pepto-mangan, were able to resume work (although their nutrition could only be slightly improved), and were able to accomplish as much as formerly.

It is well known that during the course of chronic malaria marked anæmia develops, which is extremely obstinate to treatment and frequently defeats all efforts to effect a cure. Even after the attacks of fever have subsided the anæmia quite often persists for a long time, and the patient becomes greatly reduced in health.

In this condition, where, as I have said, other preparations of iron frequently leave us in the lurch, Gude's pepto-mangan has rendered us good service. We have had occasion to employ this remedy sixteen times in

anæmia following malaria, and report the following two cases by way of illustration:

Margaret Sch., aged 26, unmarried, scrofulous tumors of the neck, anæmia following malaria, gastric catarrh; bodily weight 58 kilogrammes (about 122 pounds). Duration of treatment two months; 800 grammes of pepto-mangan used with material and continuous improvement. Vomiting and headache have disappeared, appetite good, increase of weight two kilogrammes (four pounds).

Bertha Pr., aged 10 years, 20.5 kilogrammes (about 43 pounds), marked anæmia after malaria and scarlatina, diphtheria. Five hundred grammes (one pint) of Gude's pepto-mangan administered in six weeks. Considerable improvement of the general condition. The patient had so much improved that treatment was discontinued, thinking it no longer necessary. Increase of weight 1.5 kilogrammes (three pounds).

That Gude's pepto-mangan is also an excellent remedy for children is demonstrated by the above observation, as well as the following one:

Annie and Willie D., twins, 2¾ years old. Rickety, pale and unhealthy color of face, appetite poor. Gude's pepto-mangan in wine, one teaspoonful thrice daily, altogether 300 grammes (ten ounces) used. The children take it gladly and it is well borne. Appetite has improved.

Finally, it may be mentioned that I have tried the pepto-mangan in several cases of pulmonary tuberculosis. Of course, the effect here was only relative, yet frequently we were able to improve the appetite and effect a slight gain in weight.

In the foregoing remarks I have somewhat in detail given my experience with Gude's pepto-mangan, and I have done this because I am convinced that it is worth while to institute further trials with this preparation. The observations thus far made were very encouraging. I will not attempt to define what part manganese plays in the new preparation. At any rate it appears that, compared with other ferruginous preparations, Gude's pepto-mangan has a better and more certain effect, and is characterized by the fact that it does not

produce disturbance of the digestive tract. It would be interesting to determine by experimentation that under the use of this remedy the quantity of manganese in the blood is actually increased. Such an experiment would definitely prove that Hannan's theory of chlorosis based upon deficiency of iron and manganese in the blood is perfectly correct.

SOME OBSERVATIONS ON THE EXHIBITION OF IRON.

BY G. A. GILBERT, M. D.,
DANBURY, CONN.

ONE of the favorable signs of the times from a medical point of view, is the general recognition by the profession of the necessity for more rational therapeutics. Empiricism is fast becoming relegated to a position which it should long ago have occupied. To-day to be deserving of attention a system of therapeutics must be founded on the correct relationship existing between the physiological action of the remedial agent, and the distinctive manner in which the etiological factor in disease influences the normal condition—a proposition which of course implies a thorough knowledge of the physiological processes. Recent experimental researches in the laboratory and elsewhere have given a remarkable impetus to the investigations begun by Magéndie a century ago, and we are now in possession of many valuable and significant facts, especially in relation to the *correspondence* which is found to exist between the secondary or toxicological effects of a drug and the symptoms of the disease for which the primary or physiological effects of the same drug is known to be a remedy. The proof of the great Spencerian theory of evolution is perhaps in nowise more strikingly illustrated than thus observing how the simple "art of treating disease" of ancient times has gradually developed into what may now be considered almost an exact science.

It is not many years since that the majority of practitioners regarded the possible benefits to be derived from the exhibition of iron, in direct proportion to the amount tolerated

by the patient, and not a few contemporaneous authorities might be cited who advanced similar views, one prominent writer stating that in the treatment of anæmia he had absolutely no preference as to the preparation of iron he used—and "the larger the dose the better." In the advanced medical thought of to-day a position thus taken would be deemed quite indefensible; not because any claims are made that no benefit has ever arisen from the administration of large doses of the metal in its various combinations, but (1) because a relapse is likely to occur, owing to the direct injury done to the digestive tract and the consequent loss of bodily nutrition—a morbid condition, by the way, for which the iron itself was originally prescribed; and (2) because these secondary effects may be avoided, as well as better results obtained, by prescribing rational doses of an organic preparation.

It is well known that dyspepsia and constipation usually accompany the anæmic as well as the chlorotic state; that they may, in truth, be considered no slight factors in producing the deteriorated condition of the circulating fluid. In the healthy individual iron is separated from the proteid fluids in the stomach (dissolved by its hydrochloric acid) in such quantity as to regularly supply the blood for its ordinary daily needs; but in case of functional disturbance of digestion, especially any diminished acidity of the gastric secretion, the metal, being without a solvent, passes on into the intestine where it acts principally as an astringent to produce constipation and irritate the mucous membrane, until its final expulsion from the body; but whatever portion chances to have become absorbed from the intestinal canal, enters directly into the portal circulation and capillary system of the liver where it diffuses through the bile, very little ever succeeding in entering into the systemic circulation. While it is evident that, since in such conditions iron is constantly being lost to the system, it must be supplied; it is equally clear it must be supplied in a manner that will require little or no chemical action on the part of the disordered stomach

to render its absorption certain; *i. e.*, it must be furnished in moderation and in a form nearly or quite predigested—as a peptonate or an albuminate.

Well-founded objections from various quarters have appeared from time to time, of late, against the practice of administering more iron than the system requires or can possibly assimilate, which may be summarized briefly, somewhat as follows:

1. Given to animals in larger quantities than can be digested, the post-mortem proves that iron becomes an *irritant* to the stomach and upper intestines, causing catarrhal inflammation; while, on the other hand, small doses merely serve to *stimulate* the functional activity of the liver and alimentary mucous membrane, thus augmenting the process of cell nutrition as well as digestion.

2. The experimental physiologist has shown that instead of increasing the capacity of muscle for work, large doses of an inorganic preparation, long continued, lessen materially the amount of work it is capable of performing, owing to the deposit of metallic iron in the system; and that like all other metals under such circumstances, it has a toxic action on nerves, nerve centers and glandular structures.

3. Iron is, of course, rendered soluble only by the acid of the gastric juice, becoming with albumen a peptonate by the action of the ferment, and is absorbed directly into the veins of the stomach; but large doses require more of the digestive secretion to render the metal absorbable than the stomach is capable of furnishing, consequently constipation is produced, putrefactive changes occur in the intestines and toxins are formed, resulting in headache, loss of appetite, seriously diminished nutrition, and finally anæmia itself.

4. According to Prof. Friese, of Berlin, whenever metallic iron is forced into the system arbitrarily from large doses frequently repeated, it passes throughout the body mechanically and causes the chlorotic condition to become, as it were, simply latent, inasmuch as "the blood has not the capability to educe from it material useful for its tissue;" and

thus it is, he continues, that the benefit derived from the old method is but apparent or transient in its effect.

After severe hemorrhage, the water and saline portions of the blood, as well as the albumen, may readily be restored by resorption from the surrounding tissues, the gastro-intestinal tract, and the lymphatic system; but weeks are required to restore the red globules to their proper number, color and normal specific gravity, for it must not be forgotten that while other mineral substances are freely dissolved in the fluid of the blood, iron is closely incorporated into the red corpuscles as one of its vital constituents. According to the late Prof. Dalton—who was incomparably the best authority on this subject—the iron does not exist in the hemoglobin as an oxide, nor yet in its ultimate analysis as an albuminate, but is directly combined with CHNO as an element, hemoglobin being resolvable into albumen+hematin ($C_{24}H_{34}FeN_4O_6$). Thus it will be seen that iron is more than mechanically associated with the red corpuscle; that it is, in fact, an elemental constituent of a living organ whose great function is to generate energy. It is principally to the iron that the corpuscle owes its faculty of absorbing oxygen so freely in the lungs, which it loosely carries and as readily parts with to the tissues, a property upon which depends the activity of nutrition, calorification and muscular action. As vegetation cannot go on without iron, so does the blood become practically functionless without this most important of its component elements.

Given rationally iron is a nutrient, not a medicine, nor a poison; and, like other essential ingredients of the physical organism, it is taken up from the food at a certain normal rate, and, if forced beyond that point, can only be deposited in the tissues as a foreign body, which, in case of a metal, becomes an irritant one. In the average sized man the blood contains forty-five grains of iron, the rest of the body containing not more than fifteen. Rarely, indeed, is more than forty per cent. of this amount lost in a given case, either through hemorrhage or by disease, leaving a balance of eighteen grains to be in

some way restored. The quantity of iron consumed in the food of a healthy individual (as of a working man) does not exceed one grain daily (a pound of beef containing but one-half grain), and of this one-third at least is used up in the coloring matter of the hair, iris, etc. In no instance does a person assimilate more than two-thirds of a grain per day for the blood itself; or, if in the anæmic state, probably only one-half as much. Fully two months, therefore, will be required by the physician to restore iron to a patient who has lost eighteen grains, or whose red corpuscles have for any reason been reduced to a number much less than 3,000,000 per cu. mm. The folly of prescribing in cases of this character such doses as have prevailed in the past becomes at once manifest.

A retrospective view of the long established ferrous and ferric combinations, recalls the therapeutical fact, that in consequence of their action in coagulating albumen and other irritant properties, their use is contra-indicated in disorders of the stomach—just when iron is usually most needed; for not only do digestive troubles eventually produce depreciated blood (*i. e.*, lack of iron), but the depreciated blood in its turn causes poor digestive power, and so on *vice versa*, a never-ending chain being set in operation, until, indeed, the physician, as “the intelligent handmaid of nature,” himself furnishes the necessary pabulum in a form readily soluble and ready digested. In regard to the exhibition of the perchloride, it is found that given in considerable doses inflammatory action is often set up at the points of elimination; *e. g.*, the liver and intestinal mucous membrane show more or less effects. It has been argued by some that, as in iodide of potash the action comes principally from the iodine, so in chloride of iron the effect may be largely that of the chlorine. Although ferri reductum is less irritant and practically inert, a serious objection is its eructations, sulphuretted and phosphoretted, owing to the oxidation of the iron, the evolution of hydrogen, and the combination of this nascent hydrogen with sulphur and phosphorus.

In whatever combination metallic iron may be introduced into the stomach, it must first undergo chemical change there, and eventually become an albuminate before it can be absorbed. The alkalescency of the intestinal juices renders them, of course, practically useless in the digestion of any portion of the metal that passes unabsorbed out of the stomach. Physiologically, therefore, as well as ethically—owing to its lack of astringency and its palatability—the albuminate of iron would seem to be the remedy *par excellence*. Its facile assimilation, and, if peptonized, its ready diffusibility through animal membrane, renders it once a necessity in case of damaged nutrition, as well as a perfectly proper remedy even in case of serious gastro enteric disturbances.

The albuminate was first recommended in Europe by Démarquay and Chisnard for anæmia and chlorosis, because of its being more readily absorbed than other preparations. Friese, Kobligh, Bérnbeck, Biel, Holdermann, Nierck, Donitz, Hager, and afterward, Prof. C. L. Diehl, all proposed methods for preparing it in solution or dry salt; but it remained for an American pharmacologist to finally get a *peptonized* albuminate that was in every respect reliable, and which at the same time could be indefinitely preserved, obtained evidently from 5 per cent. of ferric oxide in combination with the pure white of egg, digested with pepsin ferment and a small quantity of hydrochloric acid at a temperature of about 100° F. This organic preparation, to which has been given the trade name of “feralboid,” has been used, I am pleased to testify, in my own individual case with the following exceptionally gratifying results:

During the past five years I have been a great sufferer from internal hemorrhoids, brought on and aggravated through heedless indifference to the commonest laws of common sense. The only legitimate etiological factor in the case was a torpid liver, ably assisted by an “easy-chair” cushion stuffed with goose feathers. Constipation has, of course, danced in constant attendance, and hemorrhages at last became frequent and profuse. So great, indeed, was the

quantity of blood lost with each evacuation that evidences of the resultant oligœmia became patent to the most superficial observer, and "physician heal thyself" was soon the salutation to be met with at every turn.

In September, 1898, the number of red corpuscles was accurately determined by Gower's hæmacytometer, and fell not far short of 3,100,000; while Prof. Hayem's hæmochronometer indicated a loss of at least 40 per cent. in the actual amount of hemoglobin; *i. e.*, instead of $12\frac{1}{2}$ there were but $7\frac{1}{2}$ parts of hemoglobin in 100 parts of blood. The work of the digestive apparatus had been poor throughout, which essentially aggravated the condition; but matters were still further complicated about this same time from an operation which became necessary to remove the necrosed palate process of the superior maxillary bone, thus leaving (until a plate was made and fitted) a gaping cavity to represent fully one-half of the bony portion of the roof of the mouth, the result of which was an inability to chew and swallow solid food, necessitating a resort to the various prepared liquid foods. Well marked anæmia, muscular weakness, mental inertia and emaciation was the general outcome. Perhaps an operation for the removal of the hemorrhoids would have been advisable, but the patient had not yet prevailed upon himself to submit to the knife, the cautery or the snare, as in his particular case the piles were numerous and exceedingly high up. Unnumbered astringent ointments, injections and suppositories, however, had been used *ad libitum et ad nauseam*, but the difficulty was of the kind inexpugnable.

Throughout three-fourths of the year 1898 iron was prescribed in heroic doses and just as heroically persisted in, until the peristaltic action of the bowels became practically paralyzed from incessant pulling and hauling, *i. e.*, from the constipating effect of the iron on one side, and the action of strychnia and other physics to overcome it on the other. Ferri reductum, tincture of the chloride and Bland's pills were the preparations principally used un-

til the count was taken in September, when the patient realized the folly of continuing further his heroic treatment, fully appreciating the necessity of a radical change. For the ensuing three months, therefore, a thorough trial was given a celebrated organic preparation and with much better results, *i. e.*, the globinometer showed a perceptible increase in the per cent. of hemoglobin. A serious fault, however, with this combination, as with all of the others (though not in this case, perhaps, to the same extent), was the considerable amount of iron, undigested, which passed mechanically through the bowels, to cause constipation, and in this case to irritate the hemorrhoids. Then, too, upon attempting to discontinue the remedy—after having taken several bottles ($\frac{3}{4}$ ss. t. i. d.)—a severe colliquative diarrhœa followed, lasting three or four days, which required heroic doses of bismuth to check, and which still further complicated affairs. This happened on three separate occasions.

A further consideration of his case convinced the patient that although he doubtless needed iron in some organic form, he did not need manganese, and that he needed to take only that quantity of iron which would be entirely digested in the stomach, leaving his bowels free to work out their own salvation. At the beginning of the present year the manufacturers of the peptonized albuminate ("feraloid") kindly furnished me with a very liberal supply of their tablets, containing one-third of a grain each. Of these three were taken every day for the first month, reduced to two during the next fortnight, since which time but one a day has been taken. The result of this change in treatment has been eminently satisfactory. Though the hemorrhoids are, of course, not cured, yet it is certain that they are much less congested. A miserable appetite has been improved; a weak pulse strengthened; a languid circulation quickened; muscular action has been invigorated, mental energy re-awakened; and, above all, *the bowels have become fairly regular!* During the last fortnight but one inconsiderable bleeding has taken place at the time of an evacuation. Though

the corpuscles have not been counted recently, little doubt can exist of their great increase, for the ammonia color-test of Malassez shows an approximately normal amount of oxy-hæmoglobin. The improvement mentioned above should undoubtedly be attributed principally to the iron, as it is only during the last two weeks of the treatment that a mouth plate has been worn, permitting a resumption of solid foods.

Fortunately opportunity has arisen for testing the remedy in four cases in private practice. Three of these were the ordinary cases of weakness, nervousness and anæmia, due largely to imperfect digestion and constipation. Two of them were of long standing and had been dosed with iron under the old régime, with no apparent result except to add to the indigestion and constipation. One of the patients had sought a new field because of the intense temporal headaches produced by the "medicine" of the family physician. They were all put upon one-third grain tablets of the albuminate, three per day, the dose being gradually reduced to two a day. For the constipation some one of the natural mineral waters was recommended. At the end of six weeks improvement was marked in every instance. Increased appetite was particularly noticeable, as well as the change in general color, muscular vigor and nerve tone.

Case IV was one of greater interest and is entitled to a somewhat more detailed account. A. G., female; single, German-American; æt. 17; a typical chlorotic; applied for treatment Dec. 10, 1898. Six months previously her nervous system sustained a sudden and severe shock from disappointment in a love affair. She had begun menstruating when thirteen, and was fairly regular up to the time mentioned, since which time the show has been scanty, almost colorless, and appearing at only irregular interval. She has lost weight; skin and mucosa pale; iris changed from deep blue to pale blue; pulse thin; temperature 98. She is illy nourished, has poor appetite; is subject to flatulence and distress in epigastrium after meals; is constipated and suffers dyspnoea upon

slight exertion. Her mental spirit is at a low ebb, and she is extremely averse to society. Vaginal examination was refused.

Treatment consisted of tincture of the chloride of iron for the first week, the patient very properly refusing to continue it longer on account of its astringency and the production of headache and constipation. For the next fortnight citrate of iron and quinine was prescribed in an effervescing solution of bicarbonate of potash, water and lemon juice. While this combination is somewhat more æsthetic, and quite satisfactory to the patient, yet at the end of the month she had not improved in the slightest particular. At the beginning of the present year, therefore, the above combination was abandoned, and the patient put upon tablets of feralboid (gr. $\frac{1}{3}$) and quinine (gr. j), three times daily. At the end of ten days improvement was indicated by increasing appetite, better spirits, fuller pulse and less dyspnoea on walking. Three weeks later at the present writing, the young woman has begun to take on a more ruddy complexion, the pallor of the face having almost disappeared. The bowels are regular; an interest is being taken in current events; the last menstruation was freer; and the bodily weight has increased three pounds. While it may be too early to pronounce this patient cured, yet the virtue of the remedy is made manifest; and it is, perhaps, not too early to state that the peptonized albuminate of iron, prescribed in rational doses, has all the symptoms of becoming a most reliable hæmatinic.

PTYALISM.—

R Potassii chloratis, gr. xvi.
Tinct. ferri chloridi, 3 iiss.
Glycerini, 3 j.
Aq., q. s. ad 3 ij.

M. Sig. Teaspoonful in water every two hours.—*The Atlanta Med. and Surg. Jour.*

For neuralgia of the fifth nerve butyl-chloral is superior to chloral; although as a simple hypnotic for general use it is not so efficacious.—*Ex.*

A FEW CLINICAL OBSERVATIONS DURING AN EPIDEMIC OF VARIOLA.

BY J. C. SLACK, M. D.,
CLAYTON, NEW MEXICO.

Health Officer for Union County.

DURING the present epidemic of smallpox in this county I have been able to watch very closely this disease, a privilege not accorded to the majority of practitioners. I have practiced medicine in New Mexico for the past ten years, and treated smallpox at intervals during this time. But the present siege of it has been by far the most severe in type of any I have heretofore treated. I am not a medical writer, nor am I seeking notoriety, but some of the cases which I have treated have a history so much at variance with the statements of prominent writers on this subject, that I will present some of them with but few comments of my own, hoping, however, that they may call forth from other practitioners some of their experience with this dreaded disease. To the average Eastern physician who is seldom called upon to treat smallpox, this article may be of but little interest. But to the physician who, like the writer, is frequently called to attend these cases, anything bearing on this disease is eagerly sought for and read with interest. Vaccination being an important factor in combating with this disease, to begin with, I will state that I am using bovine virus prepared by the Missouri vaccine farm, and also by Parke, Davis & Co. I merely mention this to show that I am using a virus that is recognized as fully up to the standard, perhaps, of any that is prepared in the world. Eugene Foster, M. D., in his excellent article on smallpox in Vol. vi of "The Reference Handbook of the Medical Sciences," page 484, states that he never saw a case of variola prove fatal in a person who had been vaccinated within ten years prior to the attack of smallpox, and does not agree with Marson as to the influence of the number of vaccine cicatrices. While I admire the article of Dr. Foster as described above, yet I must say that my experience with variola has been different from his. I am strongly in-

clined to concur with Marson with reference to vaccination. I have yet to see my first case of smallpox or varioloid where the patient could show the scars of three or more successful vaccinations, while I am at present treating six children in one family, where five of them had been successfully vaccinated in one place each, by the father, with fresh tube virus furnished him by me from Parke, Davis & Co. The virus was all right as far as it went, but fell short of the amount required to immune. Four of these cases are of the confluent type, and came near proving fatal. On the 24th of January last I was called to see Jesus Marea Chavez, a Mexican boy sixteen years of age, who had been vaccinated in November, 1898, and had a good scar to show for it. Knowing that he had been vaccinated, I expected to find a case of varioloid, but found instead a case of variola confluens, temperature was 106 and the eruptions spread all over the body; suppuration was rapid and the entire face soon had one continuous covering having the appearance of a mask. The temperature never dropped below 104, and the patient died on the seventh day. On February 3 I was called to see a Mexican child four years of age, who had been vaccinated two years before in one place. I there found a case similar to the one above mentioned, which proved fatal on the eighth day. Two other children in this same house are now down with smallpox, and the disease is running its course showing nothing of the varioloid type, although they had both been vaccinated in one place. In this connection I would like to say that, ignoring entirely the failures caused by stale and inert virus, and speaking exclusively of fresh and best virus obtainable, I am decidedly of the opinion that to render a person immune from smallpox there should be at least two tubes used, and four insertions to each person vaccinated. In other words, a person to be immuned, should be thoroughly vaccinated as often as it will take, thereby charging the system to its fullest extent.

A few words in regard to treatment: I will emphatically say, use

no quinine. It does not reduce the temperature, but increases the delirium. I have given it before I learned better until the patient would be so delirious that they would have to be tied in bed. In the initial stage I use acetanilid in from one to five grain doses every hour, owing to the age of the patient. This promptly reduces the temperature, starts the perspiration and brings out the eruptions, three very important things in treating smallpox. I give the patient plenty of milk, eggs, and native wine, and relieve constipation by mild purgatives. Locally I use in the first stage of the eruption the following preparation: thirty grains each of crystallized carbolic acid and iodoform to one pint of glycerine, to be brushed over the eruptions three or four times daily, which to quite an extent relieves the intense itching and pain of the eruptions. Many writers claim that no local treatment has the power to prevent pitting of the skin, but I have had marked success with the following preparation: Oil of tar and carbolized vaseline, of each one ounce, lanolin, three ounces; mix thoroughly and apply to the face and neck, hands and arms three times a day and I will insure you that there will be no pitting. In my general practice in this Territory during the past ten years, I have treated a great many patients who have at some time in their life had smallpox, many of whom were badly pitted on their face and hands, but I have never yet seen one who was pitted under their clothing. The pitting is undoubtedly caused by the air coming in contact with the pustule at the stage when the pus is being emptied, thus drying it in a concave form, and the body, although covered like the face with eruptions, being protected from the air by the clothing or bedding, never pits. The above named preparation, while easily applied, will form an air-tight coating with no pain to the patient.

In delayed union of bones, wiring is to be preferred to any other method of treatment in use at present. The wire may later be removed.—*Brinton, Ex.*

BILIOUSNESS.

BY DEERING J. ROBERTS, M. D.,
NASHVILLE, TENN.

ONE of the errors of the age is excessive alimentation. The amount of food consumed in this country would be ample if appropriated to one-fourth, or better far, one-half as many more individuals. "Eating to live" and "Living to eat" are widely different in their results. Those following out the former aphorism as a rule of life rarely have occasion for the aid of a physician; while in the latter is to be found to a large extent, the clientele of the medical profession. Excessive alimentation unduly taxes the liver—more food being consumed than is needed, this important glandular structure is sadly overworked, and as a result, in addition to the outcroppings of acute disorders, we find many individuals, especially those who have reached the middle period of life, developing quite a series of chronic pathological conditions, which if not effectually disabling in their effects, are quite sufficient to render life a burden, interfering with mental and physical integrity, and seriously impairing vital power, if not eventually leading on to death, as an indirect, if not as a direct, cause.

Among many conditions to which we find our attention so often called in both men and women, especially those of middle age, may be mentioned gout and the gouty condition, rheumatism and the rheumatic condition, neuralgia, asthma, chronic constipation, etc., in all of which to a greater or less extent will be found defective hepatic action. In such cases uric acid invariably exists in the blood and tissues in excess. Normally urea and uric acid are formed by the liver in the average adult human being in each twenty-four hours, in the proportion of about 500 grains of the former to between 8 and 10 grains of the latter. Both are highly nitrogenized, crystalline bodies, and in the excessive alimentation which is the curse and bane of civilized people, and especially with reference to nitrogenous foods, this proportion is varied by an increased development or production of uric acid.

The classical monograph of J. Milner Fothergill bearing the title of "Indigestion and Biliousness," issued from the press of Wm. Wood & Co., in 1881, and the splendid little brochure of Dr. Alexander Haig of more recent date on "Uric Acid as a Factor in the Causation of Disease," have been of inestimable value to me, both from a practical as well as a theoretical standpoint. Both are replete with most valuable suggestions. From the "American Medical Lexicon, on the Plan of Quincy's Physio-Medicum, etc.," published by T. & J. Swords, New York, in 1811, I quote the following, having reference to bilious diseases: "The real exciting cause of these disorders called 'bilious,' being generally a hostile stimulant and pestilential acid in the *primæ viæ*;" and in the "Edinburgh Practice of Physic," published for G. Kearsley, Fleet Street, London, in 1800, I find the statement that: "A very ingenious work has lately been published by an anonymous author entitled 'A Treatise on Gravel and upon Gout,' in which the source of which are investigated, and effective means of preventing or removing these diseases recommended. In this treatise an attempt is made to prove that both diseases depend upon a peculiar concreting acid, the acid of calculi, or the *lithic acid*, as it has been styled by some." Even Hippocrates discussing rheumatism stated that the bile mingled with the blood in the veins and articulations, causing swelling of the joints, or extending to the whole body, producing acute pain. In 1610 William de Baillou published his thesis on rheumatism, in which he endeavored to show the distinction between this disease and gout; and Sydenham, 50 years later, with his inimitable logic made even a more distinct division between the two. Cullen, Stohl and Van Swieten in their teachings promoted these views and favored their treatment accordingly, yet the developments of later days have demonstrated the existence of an excess of uric acid in the fluid and tissues in both these, as well as in other morbid conditions. The excess of lithic acid and lithæmia of the distant past are identical with the excess of uric acid and uricacidemia of more

recent days and constitute a marked feature of biliousness.

Fothergill says "Biliousness may take one of two directions. In some persons there is the regular bilious attack—headache, furred tongue, disturbance of the alimentary canal, vitiated stools, and fullness over the hepatic region, the urine being merely highly colored. In others, again, there is rather a dyspeptic condition, with the appearance of lithiætes in the water, especially two or three hours after a meal. There is no essential difference betwixt the two; in each there is defective oxidation. But in the one bile acids seem to preponderate, while in the other the urinary products of nitrogenized waste take the leading place. The first is rather the condition of the congenitally bilious, the latter of the congenitally gouty."

It has long been known that faulty liver action is attended by a series of phenomena widely varying in character, from the acute attack of indigestion due to over indulgence in rich and highly nitrogenized food, to the more persistent and chronic affections, such as neuralgia, rheumatism, gout, etc., in all of which conditions the liver being unduly taxed there is the development, rapidly or more slowly, of an excess of uric acid. The chemical equations of urea and uric acid are quite analogous, and while one equivalent of uric acid may be broken up into two of urea, the obverse has not been shown. Yet, in the metabolism of nitrogenous matter, under the stress of over exertion on the functioning powers of the liver, it is reasonable to believe that the result is not perfect, and that matter, instead of forming urea, which is quite soluble and readily thrown out by the renal excretories, we have an excess of uric acid, not near so soluble, and which is only in limited quantities capable of being so eliminated.

The mercurial, followed by a saline purge, so earnestly advocated by Fothergill, and which is so well known for its excellent effects in these conditions, acts most admirably for the time being, and is, as a rule, prompt in giving relief—permanent in acute cases, temporary possibly, in those of a more persist-

ent or chronic character. Again, the rigid vegetarian dietetic rules of Dr. Haig act most excellently, both as prophylactic and curative. In the discussion of a paper on Lithemia, read by Dr. A. N. Upshur at the Tri-State Society of Virginia and the Carolinas, recently published in the *Charlotte Medical Journal*, Dr. Hunter M'Guire, of Richmond, fully sustains this statement, as observed by his own case. The renowned Abernathy in his advice to "live on a shilling a day and earn it" struck the keynote to this whole subject.

But, alas! "Ephraim is joined to his idols!" Preach as we may, advise and re-advise, adjure, conjure and insist, yet our people, aye, and our doctors, too, for that matter, knowing these facts both by observation and precept, still continue on the even tenor of their way; and the people of the civilized world, both doctors and their clientele, are now, as they have been for centuries past, still struggling, groaning, moaning, aye, and even dying day by day, the victims of their own appetites, in the grim grasp of uric acid.

Physiological chemistry has made great and wonderful strides, its advance and progress have been most marked indeed; yet pharmacological chemistry has not lagged in the rear. The latter part of this century has witnessed the development of many new remedies, including quite a number of synthetical compounds, as well as special compounds of both old and new drugs and pharmaceuticals, some of which under a special trade mark or copyrighted protection, which extends only to the special name or designation, have proved of incalculable value. In the many that have been introduced, some, having failed in sustaining the claims made for them, have been properly relegated to obscurity. Yet, others, having material value by reason of stable and known qualities, uniformity of pharmaceutical strength and composition and well demonstrated clinical results, are being used daily by many of the ablest and most reputable practitioners of the day. Among the recent additions to the latter class is a compound of lithium and saline laxatives introduced by The Vass Chemical Co., of Danbury, Conn., to

which they have given the name of *Thialion*, which has proved of marked value in gout and gouty conditions, rheumatism and rheumatic conditions, neuralgia, chronic constipation and defective hepatic action.

Having given thorough trial to thialion in a number of such conditions, and having obtained such universally satisfactory results therefrom, I have no hesitation in earnestly commending and calling attention to it, feeling convinced that it will prove a "stayer," and will be appreciated by all who give it a trial. Prominent among the factors in the successful treatment of lithemia or uric acidemia, or to use the expression with which I have headed this article, "Biliousness," especially if of a chronic or persistent character, may be considered first, a rigid dietary in which albuminoids and nitrogenous matter are restricted to the minimum, plenty of outdoor exercise and a reasonable amount of labor or duty to absorb attention and prevent morbid introspection; and second, the administration of medicinal agents to aid the system in eliminating the excess of uric acid formed. In acute cases the mercurial followed by saline laxatives ordinarily is quite effective; but in more persistent conditions as a medicinal agent, I have found thialion more efficacious than any other remedy or combination of remedies used.

In gout, rheumatism and neuralgia, colchicum has long enjoyed a high degree of professional favor, which it has attained by its active eliminant action, increasing all the secretions; yet it is objectionable by reason of its occasional tending to purge excessively, its griping and the distressing nausea it sometimes produces. To get its effects it must be pushed. It unquestionably increases the elimination of uric acid, and could it be deprived of its occasional unpleasant effects would be more appreciated than it has been. No remedy for successfully eliminating uric acid has so successively stood the test of experience as lithium, for the reason that its combination with uric acid results in the formation of a lithium urate, which is the most soluble of all the urates. In thialion we have a combination

of lithium with saline laxatives, forming the most active and powerful solvent of uric acid, which with the mild, but efficient laxative effects of the salines add greatly to its value.

A brief resumé of a few cases in which thialion has been successfully tried is herewith submitted, beginning with the case of Mr. W. M. P., white, æt. 39, a commercial traveller, who was the subject of repeated and persistent attacks of sick headache, frequently prostrating him completely for a week or ten days, and leaving him incapacitated for business for two or three weeks following. Preceding the attacks he would be greatly troubled with melancholia; everything looked blue and gloomy and everything seemed to go wrong; despondent and with indefinite anticipations of trouble. Bowels would become sluggish, skin dry, urine high colored with specific gravity of 1030 to 1035, highly acid. Was always a hearty eater and would not control his desire for meats. Mercurials, followed by salines occasionally deferred and sometimes lightened the attacks. In August last he was advised to take thialion in teaspoonful doses in half a glass of water every three hours until bowels acted freely—then one teaspoonful in a glass of hot water half an hour before breakfast each morning for three or four weeks. The result has been that he has not since had a repetition, a longer interval than has occurred for years. He has had several premonitions of an attack, but they have invariably subsided under this line of treatment.

CASE II. Mrs. R. J. D., æt. 51, nullipara, menstruation ceased six years ago. Had been healthy all her life with the exception of attacks of neuralgic headache, accompanied by distressing nausea and vomiting, lasting for three or four days. Had been subject to same since girlhood. Her father suffered similarly all his life. In her case the prodromata consisted invariably of "a fit of the blues," accompanied by constipation, high colored and acid urine, preceded by increased appetite. Had never passed more than six or eight weeks without an attack and had become so familiar with them could always anticipate them with almost unerring

certainty. It was hoped that the menopause would be accompanied by improvement, but disappointment resulted. She was placed on thialion, as in the preceding case, also in August last, and has been free from her ancient enemy ever since by resorting to it from time to time.

Mr. R. B. J., æt. 58, had been a sufferer from muscular rheumatism for the last twenty years, the attacks increasing in frequency and severity, so much so that the last three years he had never been free at any time from a greater or less degree of agonizing torture. He tried faithfully remedies and combinations of remedies innumerable, including several trips to Hot Springs, Ark., never deriving complete relief. In fact the most satisfactory relief he has had has been since last September, when he was placed upon full doses of thialion until free action from the bowels, and then continuing one teaspoonful each morning. He has had but little if any suffering during the entire time, but has kept up the use of thialion pretty regularly, occasionally taking it sufficiently to produce a full laxative effect.

CASE IV. Mr. H. S. D., æt. 48, attorney at law, engaged in active practice since his 21st year. Of full habit, a hearty feeder, but full of energy and active habits. For the past ten years had had quite a number of distinct attacks of gout, which would be relieved by ten days to three weeks active treatment, accompanied by absolute rest, low diet, etc. Commenced the use of thialion with him in the incipency of an attack early in September last, and it gave him such satisfactory relief that he now considers himself, with the aid of thialion, to be immune.

CASE V. G. T. W., æt. 49, dark complexion, active habits, blacksmith, had for past twenty years suffered more or less from asthma. The attacks would always be preceded by dullness, low spirits, lassitude, sluggish bowels, high colored and acid urine, of high specific gravity. Had tried remedies almost without number, and had for some time given up to be incapacitated from one-fourth to one-third of each year by means of his trouble. In November last, at the beginning of an attack, I gave

him thialion freely as previously cited, continuing it since. He received so much relief within the first week that he says he expects to use it more or less regularly, and especially so if his present satisfactory condition continues.

Other cases might be cited, with such neurotic phenomena as vertigo, tinnitus aurium, insomnia, neuralgia, *et id omne genus*, yet in all cases attributable to uricacidemia, or, as I have termed it, biliousness, I have found in thialion a combination that has given me most uniformly satisfactory results.

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THE MAXIMUM DOSE FOR CHILDREN OF VARIOUS DRUGS IN THE FORM OF SUPPOSITORIES.—It is often the case in children that the digestive tract is so irritable that all medication is rejected, while the stronger drugs frequently call forth vomiting and diarrhoea, and thus fail to produce the desired effect. Force is sometimes required for children who refuse to take medicine, and the resulting excitation is harmful; on the other hand, suppositories may be introduced into the rectum unknown to the child. The absorption per rectum is complete, but is altered by various conditions; the process is slower than stomach or intestinal absorption. We can, therefore, always begin with the same dose as is prescribed per os, and this dose may be increased after the tolerance of the child is ascertained. The drug should be thoroughly incorporated in the suppository to insure gradual absorption. *Der Kinder-Arzt* gives the maximum dose of the following drugs in suppository form:—Opium: Of this powder, 1 mgm. for each year of the child's age; this dose may be repeated in severe cases every two hours; watch carefully for toxic symptoms (narcosis, myosis). Aconite must be employed in large doses in children to produce its effects; to test the susceptibility give 1-2 drops of the tincture up to 10-12 drops in twenty-four hours for each year of age. Belladonna: for each two years of age 1 cgm. of the extract may be used in twenty-four hours, this quantity to be divided into four suppositories. Digitalis: as the powder is

very slow of absorption, the tincture should be employed in maximum dose of four drops for each two years divided into two suppositories. Caffeine may be combined with equal parts of benzoate of sodium, and given in two suppositories of 1 cgm. for each year of age. Quinine is best given in suppository form, the daily dose not to exceed 15-20 cgm. for each year of age; it should be divided in two parts. Antipyrin, same dose as of quinine. Salicylic acid, 50 cgm. for each year, in three or four doses. Nuxvomica, 1 cgm. for every two years, in three suppositories; children over ten years of age should first receive strychnine. Mercury must be employed in exceptional cases only, and then only in the form of calomel, of which use 5 cgm. in one suppository for each year. Iodine and the iodides are splendidly borne by the rectum, and absorption is complete; 20 cgm. for each year, in two parts, is the maximum dose; 5 cgm. when administered for a long period. Bromides, same dose as of the iodides, except in cases of severe spasm, as in stridulous laryngismus, when 1 gm. for each year should be given in two doses following closely upon one another.—*Medical Record*.

ALCOHOLIC ANURIA TREATED BY ARTIFICIAL SERUM.—Dr. Dumont (*Le Scalpel*) reports the case of an alcoholic individual who was suddenly seized with suppression of urine. This patient was very stout and it was difficult to outline the bladder by palpation and percussion. At the time that the author first saw the patient he had not urinated for 24 hours. He had taken great quantities of diet drinks of the diuretic class; his temperature was normal and his pulse very rapid. He passed, at long intervals, a few drops of albuminous urine. The following day his condition remained the same. A sound introduced into the bladder removed only a few drops of urine. The following day his general state became bad; pulse 140. The evening of the second day the anuria persisted, in spite of large doses of theobromine. The situation became grave and Dr. Dumont, basing his act on knowing the good effects of

artificial serum in cases of uræmic eclampsia, prepared a sterilized solution of salt water. A litre was injected at three different places—the pectoral, abdominal and axillary regions—at the same time. On the following day the patient was completely transformed. A half hour after the injection he had a sudden evacuation of gas and he commenced to urinate. At the end of the first day the quantity had reached three litres and the albumin had disappeared.—*Med. Rec.*

PREVENTION OF HAY FEVER.—

In the January 21, 1899, number of *The Journal of the American Medical Association*, Dr. Alexander Rixa, of New York, contributed a very interesting article on "Prevention of Hay Fever." After a highly interesting historical review, and a brief survey of the results achieved in the past few years, the writer resumes the results of his own investigations.

His ingenious researches for a number of years, regarding the etiology of hay fever, lead him to admit that the pollen of the Roman wormwood, ragweed (*ambrosia artemisiæ-folia*) is the primitive and active cause of this peculiar disease. By inhaling these pollen he produced the symptoms of genuine hay fever. He writes as follows:

From the time I found the pollen to be the exciting cause of the disease, I concluded in a logical way upon the proper treatment. I conceived the idea of rendering the receptacle aseptic by preparing the soil for the reception of the pollen. Naturally, they will find no proper soil for a possible generation, propagation or development, destroying their existence in embryo, so to speak, and with it the real cause of hay fever. For this purpose I decided on the following treatment.

About two weeks before the onset of the disease I commence to irrigate or sterilize the nasal cavity and the post-nasal spaces with a harmless antiseptic solution, using the douche and atomizer. After giving a great number of antiseptics a fair trial, I decided on Hydrozone as the most innocuous and most powerful germicide. Hydrozone is a 30-volume aque-

ous solution of peroxide of hydrogen. At the beginning I use it for irrigation diluted in the proportion of one ounce of Hydrozone to twelve ounces of sterilized water. Nearing the period of the expected onset of the disease, I increase the dose to two or three ounces of Hydrozone to twelve ounces of the sterilized water, according to the severity of the disease, using the douche, either tepid or cold, four times a day—morning, noon, evenings and at bedtime—while during the intervals I use the atomizer, with a solution of Hydrozone and pure glycerin, or sterilized water, one to three, thus keeping the nares perfectly aseptic during the entire period, and preventing the outbreak of the disease in consequence thereof.

In most obstinate cases, when there is still some irritation in the nasal cavity, I give as an adjuvant the following prescription:

R Acid boracic, gr. xx.
Menthol, gr. iv.
Glyco-thymoline, ʒ ij.
Sol. eucain B. 4 per cent., q. s.
ad ʒ ij.

Sig. Use in atomizer.

As a rule this treatment was sufficient to avert the disease and keep the patient in perfect comfort.

LUMBAGO.—

R Potassi iodidi, 3 ss.
Tinct. opii deod., 3 ij.
Spir. lavandulæ comp., 3 j.
Spir. ætheris nitrosi, ʒ ss.
Aq. destillatæ, ʒ xij.

M. Sig. Take two tablespoonfuls twice daily.—*Brodie, The Atlanta Med. and Surg. Jour.*

LOCAL ANESTHETIC.—

R Menthol, 3 j.
Chloroformi, ʒ x.
Ætheris, 3 xv.

M. Sig. Use as a spray over field of operation. Anesthesia lasts from two to six minutes.—*Louisville Med. Mon.*

Nitro-glycerine has but little power over the pains of aneurism; it acts best in the angio-spastic forms of angina pectoris.—*Ex.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

THE SURGICAL TREATMENT OF VARICES OF THE LOWER EXTREMITIES.

IN a recent article by Kraemer the etiology and treatment of this condition have been treated in full. He excludes mechanical causes and acquired lesions of the vein wall, and believes the latter condition to be always a secondary one. There is believed to be something in heredity, as the typical case presents certain characteristics such as excessive stature—long extremities—knock-knee and flat-feet—all of which point to congenital anomalies. The author therefore concludes that in these cases there is a congenital defect in the saphena, which consists either in the absence or diminished supply of the normal valves. This view has been confirmed by an examination of several excised veins. The three most popular surgical procedures are:—the ligation of the saphena according to Trendelenburg—the radical extirpation of the vein as practiced by Madelung, and the excision of only a section of the diseased vessel. In the case of the first there are many relapses, though the latter are greatly exceeded by the cases which recovered. Thrombosis and embolism were also more common with this than with other methods, though fatal results are rarely observed. As regards the method of total extirpation, the data are insufficient, though the reports are uniformly favorable. Every surgeon of

experience is well aware of the unsatisfactory results of the expectant, or purely mechanical methods of treatment, and has come to recognize the fact that a vessel once enlarged or dilated can never regain its original size or calibre. In the well-marked cases, therefore, one may feel justified, in the light of recent investigation, to recommend some of the radical procedures above noted, as offering the only possible chance of recovery.

NON-TOXIC TOBACCO.

THE FACT that tobacco contains several toxic principles which render its use injurious to health has forced many to give up its use entirely, and obliged them to undergo for long periods of time the discomforts of forced abstinence.

Substitutes are notably unsatisfactory and all previous attempts to extract its poisonous constituents has resulted only in the production of a tasteless and unsatisfactory article.

Recently, however, another plan has been instituted. Recognizing the fact that the aroma and agreeable taste of the tobacco is largely due to the nicotine which it contains, Prof. Gerold, of the University of Halle, a toxicologist of some note, devised a process by means of which this active principle was preserved in the tobacco, but at the same time was rendered insoluble. Various tests which have been made, show that the plant thus treated is devoid of toxic properties, so far as the nicotine is concerned, and may be smoked in considerable amounts without appreciable injury to the consumer.

Such a discovery as this is a most important one from a medical standpoint and cannot fail to interest every professional man whether he be himself addicted to the use of tobacco or not. To the habitu , however, whose nervous system has become intolerant to the ordinary product, it will be looked upon as an unmixed blessing.

After Office Hours.

IV.

WE WERE talking of the unreliability of patients in general and the perversity of the venereal subject in particular, and I ventured to quote the remark of Ricord:—"The science of the physician is above the assertions of the patient."

"Yes," said Budweiser, as he cut the string on a package of santal midy capsules, "I have often thought of that remark of his and tried to imagine the enormous experience which he must have enjoyed in that ever gay metropolis. I judge that he must have experienced many rude awakenings however, for you know that he finally lost faith completely in the virtue of his fellow-men, as that *bon mot* of his regarding the vestal virgins would serve to indicate.

But, really, the total depravity of mankind as regards truthfulness is somewhat surprising. Now, if there is anything of more vital importance to a patient than an accurate, truthful history of his case, I don't know it, yet this individual will make it a point to suppress and falsify and make all sorts of statements which tend to deceive and mystify his attending physician. The Psalmist needn't have apologized for saying that all men were liars, for if he had ever served through a venereal campaign he would have said it at his leisure and stuck to it ever afterwards.

Yet I don't know as this is deliberate and premeditated in all cases, for you understand that many men are unconscious and irresponsible liars. They are mentally incapable of telling a thing just as it is. Their intentions may be good enough, but outside of one or two main facts, their reports are practically worthless. So it is when they come to you for advice. Their descriptions are vague and indefinite, or else they are made up to correspond with some disease with which they believe

themselves afflicted. Ruskin once said that the greatest thing a mortal ever did was to see a thing clearly and then tell what he saw in a clear way. And now, after an extended sojourn in this vale of tears, the wisdom of the assertion seems more than ever apparent and I have come to distrust absolutely the capabilities of the children of sin. In fact, my eager inquiries into the condition of my patient are more for effect than for the purpose of acquiring any valuable information from their voluble and at times picturesque descriptions. 'The seeing eye and the hearing ear' are far above forms of speech and my physical examination tells me more in a minute than the patient can impart in an hour. Science brings to light the sins of our forefathers and arraigns at the bar of justice the delinquent and the transgressor;" and the doctor reached for an old vellum covered volume lying half concealed under a pile of splints and from a collection of Arabian proverbs, read the saying of Ben Asai:—"The world is supported by four columns—The justice of the great, the prayers of the good, the valor of the brave and the science of the doctor."

"Even in those days of alchemy and magic there was a wide-spread appreciation of a calling which dealt in facts and realities and which ignored false doctrines and fleeting heresies. The science of the doctor is more in evidence to-day than ever before. In many medico-legal and psychological problems it shines pre-eminent. In gauging the probabilities of life the physician attains at times almost the gift of prophecy and in critical moments, when the wisdom of the sages is invoked in vain, he comes forward and with unerring accuracy interprets 'the writing upon the wall.'"

A note arrived just here from Miss Guinevieve Flynn stating that the latter was having another of her

"pressed spells" and desiring some more of those flat tablets which helped her so before, and as the doctor retired from view, I was left to meditate upon the sudden transitions from the grave to the commonplace, which prevail in our profession. Life is admittedly full of incongruities, but nowhere are they seen to better advantage than here. Sad, gay and grotesque form the warp and woof of the moving canvas, and so intimately are their outlines blended that we must look twice to distinguish the bright from the sombre or the pathetic from the ludicrous. Here on the table stands a jar containing a fatty heart in alcohol, which in certain moods might have recalled to us a soliloquy like that over poor Yorick's skull, and here beside it some theatre tickets and a programme. On the mantel a statuette of "The Rock of Ages" and nearby a set of cupping instruments.

But speaking of cupping, I suppose every doctor employs some one method which all the rest of his confrères unhesitatingly designate as useless and absurd. Now wet cups were one of Budweiser's weaknesses. He prescribed them for about everything—and for the exception he gave Warburg's tincture. Moreover, he had such a way of presenting his favorite cure to his patients that some of them became in time as enthusiastic as he and looked upon the procedure as the one essential of salvation. A voluble, assertive woman would come into the office and solicit aid for some of her favorite ailments. The doctor, however, utterly ignoring her therapeutic suggestions, would gaze at her solemnly through his cylindrical lenses and say—"Madam! you must be cupped!" and, forthwith, the patient is transformed into a weak and submissive suppliant, and involuntarily loosens her waistbands and prepares for the inevitable. But for all this, the reflex results of the method were

at times remarkable and the patient would be deprived at once of some deadly affection which she had treasured for years, and with the vagaries of which she had proudly entertained the neighborhood since the days of yore.

The doctor really hadn't much faith in medicine for everyday ailments, but dealt mostly in advice, psychological agents and placebos, and upon provocation, could detail scores of cases in which he amused the patient while Nature cured the disease. But if, perchance, Nature failed signally to perform her task, he considered the case not without its many redeeming features, for there was the *post mortem* with its conclusive evidence and its beautiful pathological treasures.

"Miss Flynn is one of my oldest patients," said the doctor, emerging from the dispensary with eight one grain charcoal tablets and sending them off with minute directions as to the manner of their administration, and a reference to the toxic symptoms which might result from their excessive use, "She employs me because I once treated her mother and hence am presumably familiar with her constitution—whatever that is. She is of a decided neurotic temperament and responds very promptly to hypnotic influences. Hence, by a complicated process of reasoning, which only the scientist can bring to bear upon such abstruse problems"—and the doctor assumed an owl-like solemnity—"I have discovered a remedy which acts upon the solar as well as the ovarian plexus, without injury to the other organs. Her experiences with this simple digestive trouble," he continued, "have been almost too harrowing for words. Even last week, she tells me that she was threatened with one of these dreaded attacks and if she hadn't had the presence of mind to place a stove-lid over her stomach there's no telling where she would have been to-

day"—and the historian entered a charge of "two dollars for medicine" upon the office day-book and thoughtfully contemplated the long row of placebo tablet bottles on the upper shelf, which in the flickering fire-light presented a beautiful kaleidoscopic appearance, while Goethe, reincarnated in the statue above them, sat, as it were, in council with us and again seemed to say:—"Art is long and life short; judgment difficult and opportunity transient!"

"How difficult it is," said my host, "for the average man to estimate the attainments of the physician, and on the other hand, what trivial and insufficient causes guide him in his choice of a family physician. The latter is usually taken at his own valuation and the ordinary rules for estimating ability are not in force when it comes to a matter of this kind. For instance the skill of a person is usually determined by his promptness in recognizing a condition and his quickness in remedying defects, but in medical practice the whole thing is reversed. If I fail to acquire a detailed history and bestow but a passing glance upon some everyday clinical manifestation, I am accused of being superficial, careless or indifferent and suffer accordingly, whereas, if I industriously thump a man's chest and proceed laboriously through the various steps of a physical examination and test the lungs in six different positions, the patient and his family are filled with awe and admiration and look upon me as a man of rare skill and attainments, not realizing the fact that this very procedure is often an evidence of incompetency or lack of experience and that a man who has made physical examinations for half a century can arrive at conclusions quicker and with greater ease than a novice in the art. Thus it happens that the ways and manners of the scientific physician are not always such as to render him popular with the masses,

who nibble at a different bait and disregard all flies which are not of the variegated order, but never mind, the doctor has the pleasures of his art and his science, and the public be d———" and Jimmy Fitzharris who had been waiting a long, long time in the hallway for his sister's "Spring medicine" was gladdened by the receipt of a bottle of dark green fluid labelled: "One teaspoonful in seven teaspoonfuls of warm water, twenty minutes after meals."

Now James, who was in urgent need of cigarettes, had formulated a dark and wicked scheme and had just started in to say that Maggie would send the money in next Saturday night, but the doctor held out his hand and simply glared at Maggie's brother and the two dollar bill forthwith passed into the possession of its rightful owner, and a silent, hopeless mortal faded away promptly into the darkness of the night. "That is why I say," continued the doctor, "that in the opinion of some, the patronage of the many is better than the respect of the few and a two dollar bill has greater potential energy than the lukewarm approval of the truly respectable." And the housemaid, Mathilde, with the bill and a pitcher, made her usual trip to a certain hostelry on the opposite corner, and disappeared behind the swinging doors.

Excision of the tonsils in older children is accomplished more effectively in Dr. Gibb's clinic without the use of general anesthesia. The child can be held firmly by a skilled assistant and every step of the operation may be seen. In the event of hemorrhage, the danger of aspiration is eliminated and measures for its control may be satisfactorily employed. *Louisville Medical Monthly.*

SINGULTUS HYSTERICUS.—Trional, one gram, in five powders. One powder every two hours.—*Spirit, Medical Record.*

Book Notices.

AN EXPERIMENTAL RESEARCH INTO Surgical Shock. An Essay Awarded the Cartwright Prize for 1897, by George W. Crile, A. M., M. D., Ph. D., Professor of the Principles of Surgery and Applied Anatomy in the Cleveland College of Physicians and Surgeons; formerly Professor of Physiology in the Medical Department of the University of Wooster; attending Surgeon to the St. Alexis and Cleveland General Hospitals. Philadelphia. J. B. Lippincott Co. 1899.

It seems strange taking into consideration the importance of this subject, that there has not been presented so far to the profession an account of any considerable experimental research into surgical shock, but the book before us gives a fair insight into the many problems involved. The scope is so comprehensive, and there are so many unsettled problems in physiology that a clearly satisfactory work could not be hoped for. But the aim has been to obtain graphic data furnished in the performance of various surgical operations or by the infliction of different injuries.

In the main the author has aimed to obtain results bearing on the subject without always assuming to be able to explain the mechanism of their production. Again, the magnitude of the subject, the great numbers of questions of physiology which are still unsolved serve as an apology for him, for the incompleteness of the research.

The book is an excellent one and is sure to attain widespread attention.

PROGRESSIVE MEDICINE.—A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 490 pages, 28 illustrations and 3 colored plates. Lea Brothers & Co., Philadelphia and New York.

"Progressive Medicine" differs radically from the many Year Books, Annals or Abstracts in which, by mere collation of material, an effort has been made to represent medical

advance. The mass gathered in such publications is left for the reader to sift and digest, a mental process which the immensity of modern medical advance has rendered a virtual impossibility for the average reader, who must nowadays rely upon the specialist to reduce science to applicable form. Recognizing this fact, Prof. Hare has secured a corps of the most capable and advanced men, each of whom tells in his own language, and in the form of an interesting narrative, the story of medical progress in his special line. The four volumes which will be published each year will cover the entire round of practical medicine in the broadest sense, and their appearance at intervals of three months, instead of annually, will ensure the more rapid diffusion of knowledge, which is a requirement of our times. The first volume, just issued, is a substantial octavo of nearly 500 pages, illustrated with engravings and colored plates, and as the yearly price for the set of four volumes is only \$10.00, it is evident that an exceedingly large demand is anticipated. That these expectations will probably be fulfilled is a fair prediction in view of the admirable manner in which the able contributors have executed Prof. Hare's novel and ingenious plan.

DISEASES OF THE EAR, NOSE AND Throat and Their Accessory Cavities. By Seth Scott Bishop, M. D., D. C. L., LL.D., Professor of Diseases of the Nose, Throat and Ear in the Illinois Medical College, Professor in the Chicago Post-Graduate Medical School and Hospital, Surgeon to the Post-Graduate Hospital, one of the Editors of the Laryngoscope, etc. Second Edition. Thoroughly Revised and Enlarged. Illustrated with Ninety-Four Chromo-Lithographs and Two Hundred and Fifteen Half-Tone and Photo-Engravings. 6½x9½ inches. Pages xix-554. Extra Cloth \$4.00, or Half-Russia \$5.00 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

The early exhaustion of the first edition of this work has afforded the author an opportunity to understand the appreciation with which it has been received as well as to thoroughly revise this second edition to

which he has added many improvements. Notable among these is the enlargement and greater detail in the treatment of the various diseases under this heading. Two new chapters have been written, one on "Related Diseases of the Eye and Nose," and the other on "Life Insurance Affected by Diseases of the Ear, Nose and Throat." Illustrated articles on "Direct Laryngoscopy, or Autocopy;" and on "Pachydermia Laryngis," etc., have been added. Many new colored drawings and half-tone engravings from photographs of interesting and instructive cases, specimens, and preparations have been made for this edition.

The book is without question an authority on the subject of the ear, nose and throat.

A TEXT-BOOK ON PRACTICAL OBSTETRICS. By Egbert H. Grandin, M. D., Gynecologist to the Columbus Hospital, Consulting Gynecologist to the French Hospital, late Consulting Obstetrician and Obstetric Surgeon of the New York Maternity Hospital, Fellow of the American Gynecological Society, etc. With the Collaboration of George W. Jarman, M. D., Gynecologist to the Cancer Hospital, Instructor in Gynecology in the Medical Department of the Columbia University, Late Obstetric Surgeon of the New York Maternity Hospital, Fellow of the American Gynecological Society, etc. Second Edition. Revised and Enlarged. Illustrated with Sixty-Four Full-Page Photographic Plates and Eighty-Six Illustrations in the Text. $6\frac{1}{2} \times 9\frac{1}{2}$ inches. Pages xiv-461. Extra Cloth, \$4.00 net; Sheep, \$4.75 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

The first edition of this book was accorded a very flattering reception by the medical profession, not only of the United States, but abroad, and from a perusal of this volume it would seem that this fact had acted as a stimulus to the talented author for we have before us a most thorough revision with the end in view of evidently maintaining the position it has secured as one of the leading works of practical obstetrics from the modern standpoint. This revision necessarily pertains chiefly to obstetric surgery and the puerperal state, since it is in these departments

that most of the progress has occurred. Some new plates and illustrations have been added in order that the practitioner can acquire his knowledge clinically.

The work is without question an invaluable one.

CYCLOPEDIA OF THE DISEASES OF Children, Medical and Surgical. The Articles Written Especially for the Work by American, British and Canadian Authors. Vol. v. Supplement. Edited by William A. Edwards, M. D. Illustrated. Philadelphia, J. B. Lippincott Company.

This volume is a supplement to the Cyclopædia of the Diseases of Children, by Keating, issued a few years ago, and brings the work up to date. When the work was first thought of Pediatrics was in no way a separate department of medicine. Indeed, few, if any, of the colleges had a chair devoted solely to the treatment of the diseases of children. But now it is fully established as a separate department of medicine. This work had much to do with the broadening of this field. This volume, as we have said before, is a continuation of the work started by the late Dr. Keating and the present editor, and is fully up to date in every particular. One singular thing is that between the death of the editor and the issuance of this supplementary volume not a single contributor has been removed, by death, with the exception of Dr. Pepper, of Philadelphia, so that the revision is made by each author himself.

To those who have the Keating Encyclopædia, this volume will prove invaluable.

INTERNATIONAL CLINICS: A QUARTERLY OF Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharmacology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs, by Professors and Lecturers in the leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penna.), Philadelphia. Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania, Assistant

Physician to the Hospital of the University of Pennsylvania; Professor of Clinical Medicine in the Philadelphia Polyclinic; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to and Lecturer on the Principles and Practice of Medicine in the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to and Lecturer on Clinical Medicine in the Aberdeen Royal Infirmary; Consulting Physician to the Royal Hospital for Diseases of the Chest, London. Volume IV. Eighth Series, 1899. Philadelphia. J. B. Lippincott Company. 1899.

In this fourth volume of the eighth series we find one paper under the head of "Drugs and Remedial Agents," eight under "Treatment," ten under "Medicine," three under "Neurology," seven under "Surgery," three under "Gynæcology and Obstetrics," two under "Ophthalmology," two under "Laryngology, Pharyngology, Rhinology and Otolaryngology," and three under the head of "Dermatology."

All of these papers are of a high order, written by men of wide and varied experience and who are competent to write with authority.

—:o:—

Current Literature.

"The Progress of Otolaryngology," by M. D. Lederman, M. D. Reprinted from *The Laryngoscope*.

"A Conclusive Proof of the Efficacy of Vaccination." From the *Philadelphia Medical Journal*.

"The Connecticut Loyalists," by G. A. Gilbert, M. D. Reprinted from the *American Historical Review*.

"A New Forceps for Intestinal Anastomosis," by Ernest Laplace, M. D. Reprinted from the *Annals of Surgery*.

The paper entitled "Impressions of American Universities" which *The Living Age* reprints from *The Nineteenth Century*, shows how our American institutions strike our English cousins.

"The Serum Treatment of Diphtheria," by William Cheatham, M. D. Reprinted from the *American Practitioner and News*.

"Angina Ludovici Complicating an Acute Suppurative Otitis; Recovery," by M. D. Lederman, M. D. Reprinted from the *Medical Record*.

"Prostatic Irritability and Enlargement—A Sequence of the Hemorrhoidal State," by J. L. Jelks, M. D. Reprinted from *The Medical Times*.

"Clinical Report from the Winyah Sanitarium. 78 Cases of Pulmonary Tuberculosis Treated and Discharged in 1898," by Karl Von Ruck, B. S., M. D.

"Two Cases of Premature Delivery to Preserve Sight," by A. E. Adams, M. D. Reprinted from *American Ophthalmological Society Transactions*.

"Notes on the Absorption Versus the Digestion of Milk," by L. Duncan Bulkley, A. M., M. D. Reprinted from *The Journal of the American Medical Association*.

"Holocain in Ophthalmic Surgery; Its Superiority over Cocaine; Its Therapeutic Value," by Hasket Derby, M. D. Reprinted from the *Archives of Ophthalmology*.

"Two Cases of Bilateral Pyosalpinx with Ovarian Cysts; Extensive Adhesions; Celiotomy; Recovery," by J. Murray Johnson, M. D. Reprinted from the *Philadelphia Medical Journal*.

The "Paladin of Philanthropy," about whom that delightful essayist, Austin Dobson, discourses in a paper contained in *The Living Age* for March 4, is General James Edward Oglethorpe.

"Conservative, Yet Effectual Treatment of Hypertrophied Prostate by Electro-Incision, Done Through the Urethra; Presentation of Specimens of Hypertrophied Prostate; Demonstration of Bottini-Freudenberg Electro-Incisor," by Bransford Lewis, M. D. Reprinted from *Medical Review*.

"The Technics of the Operative Treatment of Intestinal Obstruction," by Frederick Holme Wiggin, M. D. Reprinted from the *Medical Record*.

That neither patriotism nor good sense is yet extinct among Spanish writers on public affairs is clearly proved by the article on True National Greatness which *The Living Age* publishes in its number for March 4. It is written by E. Gomez de Baquero, and is translated from *La Espana Moderna*. It is a very sane and candid article, and shows a clear perception of the needs of Spain.

The March *Cosmopolitan* illustrates one of the things that have been made possible by its large circulation. Dividing the cost of the most expensive articles and illustrations by hundreds of thousands reduces these items to a comparatively small fraction for each magazine. For this reason, expenditures may be almost unlimited to secure the best. Nine of the most noted illustrators are represented in the March *Cosmopolitan*. The cost of a single series—The History of Mohammed, of which six drawings appear in this number—for illustrations and plates, will exceed four thousand dollars; and there are in this one issue of *The Cosmopolitan* no less than one hundred and thirty-three illustrations, all told. It is believed that no single magazine, even of the thirty-five cent variety, ever presented in such numbers illustrations of so high a quality.

Self Culture for March is a very attractive number of an interesting and valuable magazine, which has rapidly made for itself a high position among the periodicals which appeal to lovers of good literature, and for which there should be a place in every cultivated home. The cover this month presents a fine portrait of Governor Roosevelt, of New York, in citizen's dress, which not only commands attention by the physical strength and determination of character so clearly portrayed, but will also be of interest to the hundreds of thousands of people throughout the country who have known the Governor chiefly as colonel of the

famous "Rough Riders," and are only acquainted with his pictures in his official dress. The independence and honesty of purpose which have always characterized Mr. Roosevelt's public life, and which he is now exercising to such a marked degree as Governor of the Empire State, and the belief of very many men in all parts of the United States that he will prove an important factor in the next presidential campaign which the party machines must consider in all their calculations, give especial interest to any picture of the man, or anything written regarding his life and work. *Self Culture* has done well to give its readers and the public so striking a likeness of the man who may be destined to "repeat history" by serving two years as Governor of New York, and then being raised to the highest honor in the gift of the people.

MARCH LADIES' HOME JOURNAL.—The March *Ladies' Home Journal* has a noteworthy feature in the page showing "Pope Leo XIII as He Lives in the Vatican." The pictures were made by the only photographer who has been admitted to the Vatican for a number of years, consequently they offer the first close view the public has had in a long time of the Pope and his surroundings. An article that will be widely read figures out "The American Girl's Chances of Marriage," and another, "Social Life in America's French City," gives a really charming glimpse into the exclusive Creole circles of New Orleans. "The most Wonderful Musical Festival in America" recalls the great Peace Jubilee held at Boston in 1872, with its seventeen hundred instrumentalists and chorus of seventeen thousand. "Churches Decorated for Weddings," "The Prettiest Country Homes in America," "Flowers and Flower Beds," and "Fifteen Good Mantels and Fireplaces" are shown from the photographs submitted in the contest for *Journal* prizes. "In Nature's Garden" pictures and describes our wild flowers so their identification will be easy. The article is by Neltje Blanchan and is the first of a series.

On his editorial page Edward Bok pays deserved tribute to his late as-

sociate editor, Isabel A. Mallon, who also wrote for the *Journal* under the pseudonym of "Ruth Ashmore." As a matter of course considerable space is given to Easter hats and frocks, etc., all illustrated from original designs. Besides the concluding chapters of "The Girls of Camp Arcady" and the experiences of "The Jameasons in the Country" there is an excellent short story, "The Touch of a Child," and a humorous sketch by John Kendrick Bangs. Mrs. S. T. Rorer continues her cooking lessons and advice upon domestic economies, and every phase and condition of home life is considered. By The Curtis Publishing Company, Philadelphia. One dollar per year; ten cents per copy.

LIPPINCOTT'S MAGAZINE FOR MARCH, 1899.—The complete novel in the March issue of *Lippincott's* is "The Sport of Circumstances," by Clarinda Pendleton Lamar, a tale of modern Southern life.

Joseph A. Nunez, in an article on "Cuba," gives timely and interesting facts relating to animal and vegetable life in our new possession.

"Recollections of a London Lawyer," by G. Burnett Smith, tells amusing incidents of London Law Courts, especially connected with the career of Montagu Williams.

Owen Hall, in "Imperialism.—An Estimate," talks about the policy of colonization.

"Brainerd's Idol," by Wm. T. Nichols, is a tale of an ambitious editor, and is followed by the "Perception of the Picturesque," by J. Hunter.

William M. Tisdale gives an interesting sketch of "Chinese Physicians in California," with details about their prescriptions and diagnosis.

"Mendicity as a Fine Art" is treated of by Francis J. Ziegler.

Geraldine Bonner has a romantic story entitled "His Honor."

"In the Night," a poem, is by the well-known author of "Nocturnes of New York," Charles G. D. Roberts.

—:o:—

A writer in an exchange says that a very prompt remedy in cases of nose bleed is simply the juice of a lemon.—*Prac. Med.*

Correspondence.

ETIOLOGY OF ANESTHESIA.

Editor New England Medical Monthly:

There is a close analogy between the effect of alcoholic stimulants and that of ether and chloroform as used in the ordinary way.

A close observer cannot fail to note that those who yield most readily to vinous stimulation are most easily anesthetized, while those who use stimulants regularly and cannot easily be made drunk, are with difficulty carried to complete anesthesia, especially with ether. The analogy would be still closer were the person using stimulants allowed no more oxygen with his intoxicant than he gets with the anesthetic.

Since it has been demonstrated that the expansive pressure of ether and chloroform at a normal temperature is fifteen pounds to the square inch, and any increase of temperature correspondingly increases its expansive force, it is evident that where the warm breath of the patient comes in contact with them, as in using the cone, towel, sponge, etc., the air is forced away, even in any attempt to let in air by raising the cone.

The absolute necessity of pure air in health and sickness is everywhere recognized, and when the surgeon is operating to save the life of his patient, how much more essential ought it to be? Yet, as shown above, the patient is always more or less asphyxiated. It is found that when the anesthetic is given with a normal supply of pure air with each inspiration, there is usually entire absence of struggling, nausea, etc., while the eye, circulation and color are unchanged. In thus using chloroform or ether the sedative effects are almost wholly absent, and the analogy to vinous stimulation referred to, is more closely marked. Those who have used the pure air method of giving anesthetics feel confident that chloroform is as safe as ether, and that no anesthetic could destroy life which is so given as to insure a normal amount of air or oxygen with each inspiration.

Indeed, while the patient has been under the full effects of chloroform,

a tank of oxygen has been substituted for the air with no perceptible result upon the patient, which proved the blood was normally oxidized.

The pure air method is as much superior to those in general use as the atmosphere is for normal life sustaining purposes to anything man has ever devised to take its place, and for the same reason.

William B. Hidden, M. D.
74 Boylston Street, Boston.

OPPOSITION TO QUACKERY.

Editor New England Medical Monthly:

Dear Sir:—At the regular annual meeting of the Tri-State Medical Association of Mississippi, Arkansas and Tennessee, held in Memphis, Dec. 20, 21 and 22, 1898, the following resolutions were adopted:

WHEREAS, The medical laws of the various states have been so perverted by political influences as to give legislative sanction to grotesque, ignorant and dangerous sects of pretenders and charlatans; and

WHEREAS, The privileges granted to one of the most outrageous aberrations, namely, the so-called Osteopathy, constitute a disgrace to the States in which the "osteopaths" are legally intrenched; and

WHEREAS, A certain William Smith, Osteopathist, having been roundly denounced, together with his sect, by Parke, Davis & Co., and the *Medical Age*, now brings suit against both for \$25,000 damages; therefore,

Be It Declared, The sentiment of the Tri-State Medical Association of Mississippi, Arkansas and Tennessee, that Parke, Davis & Co. and the *Medical Age* are entitled to the sympathy of its members and of all medical practitioners; that we wish and expect them to enjoy a complete triumph in repelling this legal assault; and that wheresoever a powerful House takes a bold stand in opposition to quackery it promotes the interests of legitimate and honorable Medicine and the welfare of humanity.

Richmond McKinney,
Secretary.

A CRITICISM.

Editor New England Medical Monthly:

Believing your columns are ever open to all without discrimination, I venture to criticise an article which appeared in the March number of the MONTHLY, under the signature of Dr. Franklin Staples, of Winona, Minn., where he said:

"The eighteenth century is reputed as the especial period of systems and theories in medicine, and of medical delusions. The vagaries of Paracelsus, Van Helmont and others of the sixteenth and seventeenth centuries still maintained an active existence, and were augmented by the works of Brown in England, Hahnemann in Germany, and a few other theorists of this time. Most of these systems and pseudo 'pathies' have disappeared under the light of modern science. *The one that has been able to resist more successfully than others the progress of science, and this seemingly because of the continuance of a certain kind of unintelligent popular support, is that of Hahnemann. This, however, seems now to continue principally in name.*"

The above portion of Dr. Staples' article is offensive. And, as Dr. Staples is in a position to know better than he writes, I cannot see how he can fail to know that his reference to the school of Hahnemann is not only offensive, but false. It is offensive in that it applies such terms as "vagary" and "pseudo pathy" to the school of Homœopathy in a manner uncalled for and unnecessary to the exposition of the subject he was writing about. It is false in saying that the Homœopathic system of practice "resists science" and this "because of popular *unintelligent* support," and false again in stating that the school of Hahnemann "seems now to continue only in name."

The word "pseudo" means *false* in the sense used by Dr. Staples. I ask in what must, I think, be conceded to be fairness, if Dr. Staples has any right as an historical statistician to apply the term "false" to that he never has studied or investigated? Had he even read the literature of his own school he would have met many favorable comments on the work of Hahnemann as a



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This, That and the Other

A Winter Remedy

That Codeine had an especial effect in cases of nervous coughs, and that it was capable of controlling excessive coughing in various lung affections, was noted before its true physiological action was understood. Later it was clear that its power as a nervous calmative was due, as Bartholow says, to its special action on the pneumogastric nerve.

Codeine stands apart from the rest of its group, in that it does not arrest secretion in the respiratory and intestinal tracts. In marked contrast is it in this respect to morphine. Morphine dries the mucous membrane of the respiratory tract to such a degree that the condition is often made worse by its use; while its effect on the intestinal tract is to produce constipation. There are none of these disagreeable effects attending the use of Codeine.

Antikamnia has stood the test of thorough experimental work, both in the laboratory and in actual practice; and is now generally accepted as the safest and surest of the coal-tar products.

"Antikamnia and Codeine Tablets," each containing $\frac{1}{4}$ grains Antikamnia and $\frac{1}{4}$ grain Sulph. Codeine afford a very desirable mode of exhibiting these two valuable drugs. The proportions are those most frequently indicated in the various neuroses of the throat, as well as the coughs incident to lung affections.

Acute Inflammation of the Prostate Gland

The *Journal of the American Medical Association* contains a report on inflammation of the prostate gland, which was presented to The Section on Surgery and Anatomy at the Forty-ninth annual meeting of the American Medical Association, held at Denver, Colo., June, 1898, by Listen Homer

Montgomery, M. D., of Chicago, Ill. His plan of treatment in acute inflammation of the prostate gland is to wash out the abscess cavity with hydrogen peroxid, give copious hot water enema and hot hip baths frequently, avoid morphine internally and advise care lest the patient strain at stool or during micturition. On the theory that toxins are retained in the circulation and within the gland and so prevent degeneration in the gland substance, he administers triticum repens or fluid extract tritipidm freely, combined with gum arabic or flaxseed infusion. Along with these remedies the mineral waters, particularly vichy with citrate of potash, go well together. Hydrate of chloral or this salt combined with antikamnia are the very best anodyne remedies to control pain and spasms of the neck of the bladder. These pharmacologic or medicinal remedies are the most logical to use in his judgment, while externally, applications of an inunction of 10 or 20 per cent iodoform, lanoline, as well as of mercury, are also of value.

Migraine—(Catarrhal.)

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Sig.—Crush and take one every three hours.

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As the years go by there is one drug that constantly grows in favor. To the physician of the Transmississippi region it is probably doubtful if it is necessary to say that this remedy is antikamnia; as all have used it. But increasing experience demonstrates its adaptability to conditions other than at first advised. It is notably of value in ovarian and other pelvic pain. If you have not tried it in this class of cases, do so.
—*American Journal Surgery and Gynecol.*

WALTER E. MORRISON, Pres.


W. E. DOW, Treas.

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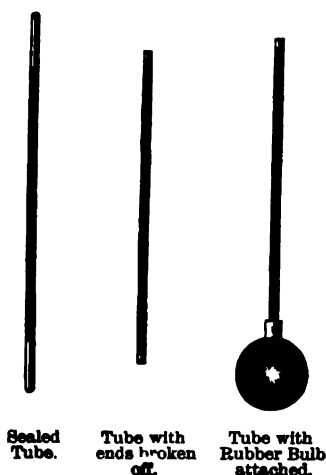
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GLYCERINATED VACCINE is aseptic vaccine—the pulp of cowpox vesicles mixed with pure glycerin for the destruction of the comparatively few streptococci or other bacteria likely to be present despite the most careful manipulation of the vaccine-producing animal. Glycerin is not a powerful germicide; but it is powerful enough, as we have abundantly demonstrated in our Bacteriological Laboratory, to render germ-free in a short time the vaccine to which in our hands it is applied. Moreover, it is perfectly harmless when applied to the abraded skin in connection with the prophylactic use of the vaccine.

To those who are in the least acquainted with our methods of serum production it will be unnecessary for us to state that in the elaboration of vaccine we guard every step with the most uncompromising scrutiny and assure the purity of the product by the most rigid antiseptic and aseptic measures. The heifers before being vaccinated are tested with tuberculin. As an additional safeguard the animals are slaughtered as soon as the vaccine is collected, and a careful inspection of the carcass is made by an experienced meat-inspector; if any evidences of disease are found the vaccine is destroyed.

“Points” are Unreliable and Unsafe.

It is a noteworthy fact that manufacturers of vaccine have generally ignored those rules of rigid surgical asepsis which have been recognised for years as absolutely necessary when the physician desires to make a break in the healthy skin of his patient. As a result, septic infection after vaccination has been commonly met with in general practise. The object of the product now offered by us is to produce infection with pure cowpox and to avoid the sores and sloughs which naturally follow the use of vaccine material carelessly prepared and often loaded with the organisms of ordinary pus.

In 1894 the Columbus Medical Laboratory of Chicago made a careful examination of eleven different varieties of vaccine “points,” made by as many manufacturers, and only one was found to be free from bacteria and blood-cells. Of the rest, several were decidedly unfit for use.

But, notwithstanding all our aseptic methods, vaccine, like other moist physiological products no matter how carefully prepared and protected, is liable to deteriorate after a certain period of time. For this reason we affix the date of shipment to each package, and authorize the drug trade to give fresh VACCINE in exchange for any quantity of unused and deteriorated virus purchased from us in good faith.

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learned physician and chemist; had he read the works of Hahnemann he would have found there ample evidence that he was neither vagarist nor pseudopathist. To make the bald statement he has on the ground of his own prejudices is unfair and undignified. He has given no authority or proof against the school of Hahnemann beyond his own dictum. In connection with his statement that the school of Homœopathy (to-day as distinctly the school of Hahnemann as ever) has resisted science, we ask "What is science?" Is not science "knowledge; knowledge of principles and causes; ascertained truths or facts; systematized and formulated knowledge with reference to the discovery of general truths or laws, classified and made available in work, life, or the search for truth?" If there is any other definition of science I do not know it. I challenge Dr. Staples' ability to show Homœopathy to ever have resisted these things. I say this kindly, not because I am a Homœopath and because of that am prejudiced against other systems, but because I would recognize truth wherever it exists and claim for Homœopathy all deserved merit, as I would for all other systems.

His statements that the continuance of the school of Hahnemann is principally in name, and because of unintelligent support, is laughable, ridiculous, and he must know, false, for there are in his own small city a round half dozen or more physicians who call themselves Homœopaths. Is he ready to stand by his assertion that the support of these physicians is any more among the unintelligent than his own? Is he ready to prove his assertion that the "principal" part of these homœopathic physicians are such only in name? Did he know that homœopathic physicians are in this day appointed coroners, railroad surgeons and physicians, superintendents of state asylums, and physicians in the army and civil service? Do they get these positions by "unintelligent support?" Does he know that a National monument is now in process of erection in the city of Washington? Is this because of "unintelligent support?"

I do not believe that any unprejudiced members of his own school will uphold Dr. Staples in the assertions he has made, or honor him any more because he has made them, if made in a spirit of prejudice. If they were made in ignorance of facts the honest way would be to confess it.

I protest against any reflections in medical literature which will tend to foster in any mind prejudice against possible truth in any part of the medical field. Whatever of untruth exists in my own or other schools I would gladly see cast aside, that whatever of truth exists may occupy the place untruth has usurped. Thus and thus only can true science be established on a practical beneficial basis.

W. W. Gleason, M. D.

Attleboro, Mass., Mar. 22, 1899.

—:O:—

Abstracts.

THE TREATMENT OF HARELIP AND CLEFT PALATE. — This much-discussed topic continues to be the subject of a good deal of doubt in many minds as to when and how to operate for the various conditions that present themselves. Many of the procedures necessary are entirely within the range of the general practitioner, but there always remains a feeling of hesitation as to the methods most advisable to employ, and the most suitable time for operation. Towards solving such doubts an authoritative review of the recent literature of the subject, and conclusive statements as to what seems best in the therapeutic suggestions that have been recently offered by various writers will be of the greatest value to the busy practitioner.

Such a review of the treatment of harelip and cleft palate is given by Dr. J. Chalmers Da Costa, in "Progressive Medicine,"* the new quarterly review of advances in medicine, of which Professor Hare is the editor. From it we gather that the tendency is more and more towards early operation. The third or fourth month

* "Progressive Medicine," a Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M. D. Vol. 7, No. 1, March, 1899. Lea Brothers & Co., Philadelphia.

used to be considered the earliest suitable time to operate. Murray now counsels operation in the fourth week; Mumford and Heath think it should be undertaken not later than from the sixth to the eighth week. Where cleft palate exists it is not operated upon so early. The harelip is operated upon alone, and the persistent pressure made by the closed lip helps to lessen the gap in the growing bone. The operation on the cleft palate is put off for awhile, but this, too, not nearly so long as it used to be. If the closure of the defect is delayed until the child has learned to talk, the peculiarities of speech, especially its offensive nasal character, will never be corrected. The authorities are agreed, then, that the cleft in the soft palate should be closed about the sixth month, and in the hard palate during the second year.

The practical suggestions collected from the recent literature of the subject by Dr. DaCosta are very valuable to the ordinary practitioner. Space will permit us to give but a few of them. The use of the knife in operation rather than the scissors, because the latter crushes tissue more, leaving its vitality impaired, especially at the edges where this is so important for subsequent union; the avoidance of pins or heavy sutures in securing proper apposition after the operation is advised, though these are faults of technique in this matter that we fear have been so ground into the present generation by text-book and teacher that failures of union due to these crude early methods will still continue to be frequent. The suggestion by Mumford as to anchoring the nares with shotted wire will remove a very common cause of failure due to the child's inevitable tendency to "turn up its nose" at and after the proceedings.

In double harelip it is advised to remove the intermaxillary bone by sub-periosteal operation a week before the operation on the lip. If left it is liable to undergo necrosis. Its removal leads to some flattening, but this will not be great if the bone be removed by sub-periosteal operation, and if but one side of the harelip be operated upon at a time. Among

the directions for the operation for cleft of the hard palate, we note these pre-operative measures of precaution from Owen, which are sometimes forgotten, but of which the practical value it is easy to see; never operate unless the child is in the best possible health; remove carious teeth, adenoids and enlarged tonsils before operating, and operate whenever possible in fine weather, so that the patient can get out of doors soon afterwards. The neglect to remove such ready sources of infection as carious teeth and those harborers of microbes, the irresistible tissues of adenoids and enlarged tonsils, is very probably the source of a good many of the failures in uranoplastic osteo resection.

CREOSOTE IN PHTHISIS PULMONALIS.
After a brief review of creosote and guaiacol and the various methods of employing these products, the author says:

"In the treatment of phthisis the administration of creosote causes the fever and cough to diminish and the patient to improve in appetite and flesh. On examination of the pulse it will be noted there is a smallness and rapidity indicating an increased anæmia produced by the powerful action of the creosote. When creosote alone is used life is made more comfortable to the patient but it causes an earlier termination. If in combination with tonics less anæmia is produced. It has antifermentative powers, and though it may not kill bacteria, it destroys their ptomaines and renders their action non-toxic and inert. In the stomach of consumptives a pathological fermentation is at all times going on, and this process is overcome by the action of creosote. It takes oxygen from the blood, and is changed into carbolates and oxalates, as a result of oxydation, thus causing the blood to assume a deeper color. In the treatment of phthisis it becomes of especial value if reinforced by nuclein. Nuclein increases the number of white blood corpuscles and is therefore a valuable agent in combating tuberculosis in its initial stage. Reviewing the aforementioned facts, we have creosote, guaiacol, nuclein

and tonics as factors in the treatment of phthisis pulmonalis. How and in what proportion can they be best combined to become efficient in the treatment of this disease. Beef, milk and wheat peptonized, with creosote and guaiacol, otherwise known as liquid peptonoids with creosote, is an eligible method of administering the above in combination. Each tablespoonful contains two minims of pure beechwood creosote and one minim of guaiacol combined with the nutrient and reconstituent properties of liquid peptonoids. In two different hospitals the entire consumptive wards were placed on this remedy with most excellent results and it will be necessary to quote but a few of the many cases under observation :

Case 1. M. P., female, aged 49, admitted to hospital June 2, 1898, family history tubercular. For some years patient has been troubled with severe attacks of cough, resulting from an attack of la grippe in 1894. Has dry, hacking cough, with gelatinous expectoration, containing bronchial and alveolar epithelium in a state of fatty metamorphosis, streaked with blood. Temperature 101 degrees. Loss of appetite and dyspeptic symptoms. Inspiration of cog-wheel character, expiration high pitched and dullness on percussion. Patient has lost about 30 pounds within last few months. Weighed on January 2d, 145 pounds. Blood count, 45 per cent. hæm. 3,000,000 red cells, 7,500 white cells. Treatment began with one tablespoonful doses of liquid peptonoids with creosote every four hours. Patient slowly improved and on June 16th, doses were doubled to two tablespoonfuls every four hours. Hereafter a rapid improvement took place. July 1st, patient's cough has disappeared, no bacilli in sputum, appetite good, weight 151 pounds. This treatment was continued till July 26th, when patient left the hospital, apparantly well. Weight 155 pounds, blood examination, hæm. 62 per cent. red cells 3,650,000, white cells, 7,200, no cough, good appetite.

Case 2. E. W., male, age 20, family history tubercular, admitted June 9, 1898, hacking cough, purulent expectoration, temperature 100 degrees,

night sweats, loss of appetite and weight, blood examination 43 per cent. hæm. 2,700 red cells, 7,000 white cells, weight 98, examination of sputum; bronchial and alveolar epithelium, bacilli. Same treatment as in case 1, began June 9th. Patient improved. June 26th, coughs but little, no bacilli in sputum, appetite good, weight 103 pounds. July 13th, discharged, apparently well, no cough, no night sweats, appetite ravenous, weight 105 pounds, blood count, hæm. 61 per cent., red cells 3,600,000, white cells 6,800.

All tubercular cases under my observation improved under this treatment, while others under plain doses of creosote gtt. v to xx showed but little improvement.—By L. H. Warner, Brooklyn, N. Y.

POINTS IN THE ARSENICAL CAUSTIC TREATMENT OF CUTANEOUS CANCERS.

1. The arsenious acid caustic treatment of skin cancers does not contemplate or depend upon the actual destruction of the new growth by the caustic.

2. The method is based upon the fact that newly formed tissue of all kinds has less resisting power than the normal structure when exposed to an irritation and its consequent inflammation. Hence the former breaks down under an "insult" which the latter successfully resists.

3. If therefore the whole affected area can be subjected to the influence of an irritant of just sufficient strength to cause a reactive inflammation intense enough to destroy the vitality of the new cells, the older normal cells will survive.

4. Arsenious acid of properly mitigated strength is such an agent, and its application causes an inflammation of the required intensity.

5. It therefore exercises a selective influence upon the tissues to which it is applied, and causes the death of the cancer cells in localities outside the apparent limits of the new growth, where there is as yet no evidence of disease.

6. It is superior, in suitable cases, to any method, knife or cautery, which requires the exercise of the surgeons judgement as to the ex-

tent to which it is to be carried. That that judgement is often wrong, and necessarily so, is shown by the frequency of recurrence under these methods even in the best hands.

7. It is applicable to all cutaneous carcinomata in which the deeper structures are not involved, and which do not extend far onto the mucous membranes.

8. It is easy of application; it is safe; it is only moderately painful; and its results compare favorably with those obtained with other methods.—By William S. Gottheil, M. D.

NEURASTHENIA, WITH SPECIAL REFERENCE TO THE BEST MODE OF TREATMENT.—Of all conditions to which man or woman is liable, none is more common than that having the above title.

The question before us is one of great import and has presented difficulties by the score; but experience, more worthy if less fascinating than the most ingenious theorizing, has at last brought to light methods of quick diagnosis and properly applied therapeutics. This neurosis is to be found in every class of society, from the banker to the laborer; neither is it confined to any particular quarter of the globe. It is everywhere. The writer does not propose, in this short article, to attempt to deal exhaustively with the problem, but rather to group together under the head of suggestions a few facts of general interest to the medical profession.

In a general way neurasthenia may be defined as a nervous exhaustion (or prostration or debility); a condition characterized by deranged state of the nervous system appearing in the early and middle period of adult life, presenting objective symptoms, slight in degree but definite in character, and persisting for months, for years, or for life. Usually there are inability to walk more than a short distance without fatigue; a variable increase of myotatic irritability; headache, aching, or pain in the back and legs; and spontaneous sensations of tingling, formication, heat and cold.

Dyspepsia, constipation, and other derangements of the functions often

result in a distressing form of anæmia.

There is a mental phase in the condition, the patient being irritable, unable to pursue a consecutive train of thought; or there may be a cheerful, egotistical resignation.

It may be due to many causes; masturbation or excessive venery, and associated with an absence of sexual desire, or of the power of erection or ejaculation, and sometimes with the various forms of sexual perversion, or vasomotor paresis, associated with irritable heart.

I presume it is true that the popular ideas are often more extreme in this direction than those of the most conservative, at least, of the profession, and that a certain amount of treatment is undertaken quite as much to satisfy the wishes of the patient, his or her friends, as to carry out the requirements of a well-considered diagnosis.

I look upon the condition as one entirely of impaired nutrition. The fact that the attention of nervous women is so frequently and strongly directed to their pelvic organs proves no more and no less than the kindred facts of nervous dyspepsia, cardiac disease or spine disease—a variety of nerve starvation. The cessation of sexual activity in the female is marked in the popular, even more than in the professional mind, by a decided tendency to nervous disorders.

Such, usually, have all the imaginary ills of the human family, and here it is that properly-directed control of the patient as to medication is so desirable.

All of the various symptoms of neurasthenia, be they sensory or motor, psychic or somatic, slowly but surely yield to general systemic and tonic treatment, and disappear, *pari passu*, with the restoration of the nervous system to its normal condition.

In combating the insomnia usually present in aggravated cases, I use drugs only as a last resort, for a properly-regulated time for meals and attention to the diet usually suffices. Sometimes I have found it absolutely necessary, however, to temporize, and one of the most valuable agents for this purpose, in my

opinion, is a first-class preparation of *cannabis Indica*—I use a fluid extract, giving 10 to 15 minims on sugar, and repeat as the urgency of circumstances requires. It is not only a valuable hypnotic, but it also relieves the mental depression, the general restlessness and paræsthesias and paralysias, of this neurosis. Constipation can be relieved by gentle massage and a regular hour of going to the stool daily. It is absolutely wrong to give the patients cathartics, especially those in the form of pills, for the pill habit is soon formed and they soon become a prey to the various advertised nostrums so often seen in our street cars and on the highway. It should be our aim to suggest to the patients, for obvious reasons, the mildest laxatives. The calibre of the lower bowel should be maintained at all hazards and all those preparations which produce a mushy stool avoided.

The gastro-intestinal disturbances of neurasthenia are to be combated by strict attention to diet. The use of the various digestive ferments may be of use in combating any gastro-duodenal indigestion present. We should not lose sight of the fact that such symptomatic treatment is merely transitory. The cause must be removed. For this purpose the use of systemic tonics, and those which affect the cells and are especially nutrient to the nerve-centres, are to be recommended.

It was my custom formerly to prescribe the various forms of iron, but an extensive experience has induced me to abandon them entirely. The relief obtained from their use was palliative and transitory. In the treatment of neurasthenia I have a decided preference for the compounds of arsenic and gold. The preparation which suits me best and which I have been prescribing extensively for the last few years is the liquid of bromide of gold and arsenic: *arsenauro*. It is not only very valuable as a systemic and nerve-tonic, but at the same time seems to have a peculiar and beneficial sedative effect, due doubtless to the bromide present in its composition. Hence it not only allays the tremors and restlessness in these cases, but it is also of great benefit in sexual neurasthenia in calming the morbid irritability of the genito-

spinal centres. We must use it persistently throughout the entire course of treatment, and bear in mind always that the neurasthenic can stand very much larger doses than they would care to admit—20 to 30 drops, largely diluted with water, after each meal.

It is impossible to carry out the Weir Mitchell rest treatment, as a rule, so I merely urge the patient to take as much rest as possible.—By Arthur E. Mink, M. D.

THE VITALITY OF EPITHELIAL CELLS AND THE ETIOLOGY OF CANCER. —

What the nature of the irritant may be that causes the localized overgrowth of epithelial cells which we call cancer, we are yet no nearer knowing than we were before the demonstration of its exact pathology, more than half a century ago. Notwithstanding all the claims that have been made of the casual influence of external biologic factors, parasites from bacteria, and fungi, schizomycetes, and blastomycetes to various forms of animal parasites, gregarines and protozoa generally, we are no nearer the solution of the problem than we were before.

Of late the subject has been approached from the other side, the essential vitality of epithelial cells and their reaction to various irritants and some most interesting results have been obtained by various observers. In Dr. Hektoen's review of this subject for the first number of "Progressive Medicine"* (the advance sheets of which are in our hands) we find some striking observations on the subject collated, Ljunggren, a Scandinavian physician, for instance, found to his surprise that he could preserve carefully sterilized bits of human skin in sterile human ascitic fluid for months, and that the cells of the tissues retained their vitality. Three months after their removal from the body the cells of the deeper layers showed well stained nuclei and good protoplasmic structure. Successful transplantation was made with pieces kept in such sterile fluid for a month. Small pieces of the transplanted skin were removed at varying intervals,

* "Progressive Medicine," a quarterly digest of new methods, discoveries and improvements in the medical and surgical sciences. Vol. I, No 1, March, 1899. Edited by Robert A. Hare, M. D. Lea Brothers & Co., New York and Philadelphia.

and it was found that a marked proliferation of epithelial cells showing many nuclear figures had occurred. Special precautions were taken, which absolutely assured the absence of cells that might have grown in from the surrounding cutaneous margin and so vitiated the conclusions. The transplanted cells not only grew over the raw surface, but penetrated, also, into the granulation tissue beneath, after the manner of a beginning carcinomatous growth.

Almost more interesting and suggestive than this are the observations made by Loeb here in America on epithelial regeneration. The abstract of them by Dr. Hektoen in "Progressive Medicine" is so clear and succinct that we copy part of it verbatim: "From the margin of a tissue-defect huge epithelial protoplasmic or plasmodial masses move in a sliding manner over the naked surface, inclosing and dissolving the crust and other obstacles. Regenerating epithelium readily removes such substances as cartilage when placed in its way. Below the protoplasmic layer epithelial cells wander in from the margins of the defect, and often grow down into the connective tissue, apparently checking the growth of the latter. The process is closely allied to changes in carcinoma. At the same time active changes, such as mitoses, occur in the epithelial cells removed some distance from the margins of the wound. * * * Loeb believes that the wandering of the cells, as outlined, is in response to stereotropism and forms a determining in inducing mitosis in the remaining cells."

The pregnant significance of these observations, especially the apparent action at a distance of epithelial elements in arousing epithelial cells into reproductive and germinal activity, can scarcely be overestimated. This is the essence of carcinoma, though in healthy subjects the vital resistance may be sufficient to restrain the morbid overgrowth that would otherwise result.

According to Loeb, "if a small bit of epithelium is placed in the centre of the crust covering a defect in the skin, it begins to send out processes in all directions into the crust, the cells acting as separate organisms, independent of blood supply or nervous influence." We are evidently closely in touch, in these manifestations, with the, as yet, inexplicable vital forces that we see at work in all their untrammelled energy and power in cancer. Further observations are needed to give the deductions from these observations practi-

cal application. They constitute, however, the most hopeful aspect of the present pathological work on cancer as far as regards the near prospect of discovering its etiology. Their value as additions to biological science, especially to that mysterious problem, the struggle for life among the various cells of the body tissues, can scarcely be overestimated.

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Notes and Comments.

Speech of Lieutenant-Governor Timothy L. Woodruff, delivered before the Medical Society of the State of New York at the Kenmore Hotel, Albany, on February 1, 1899.

Mr. President and gentlemen of the Medical Society of the State of New York:

It was with great regret that I was obliged to decline the formal invitation extended to me by Dr. Ward to be here to-night in consequence of a long standing engagement to attend a dinner in New York this evening, and it was with equally great pleasure that I found your invitation still open to me when at the last moment I received a telegram that the dinner in New York had been postponed on account of the illness of the hostess. When I told Dr. Ward of this fact, what do you think he said? "I never before was so glad to hear that any human being was sick." Knowing him, as I have for the past two years, even though he be a practicing physician, I am sure this is the only occasion on which he has, even for the sake of courtesy, expressed or felt pleasure at the illness of any living thing.

It is rather rough on you, after all the years I have kept a pack of able-bodied and energetic young men on your trail, inciting them constantly to waylay you in office, in library or in your bedrooms, at the Medical Society meetings, or anywhere else they could catch you, for the purpose of demonstrating the value of that which modesty forbids me to mention, that I should now have you nicely corralled where you can't get away. But don't worry, I am here in the capacity of a public official and not as a physician's purveyor. I bow, here and now, as I always have done, to the highest and purest ethics of professional and civic practice.

It is an unusual privilege to be in company with so many distinguished pillars of the medical profession. The capital of the Empire State

annually extends to you a warm and hearty welcome. Whether it will be so another year is a question of some doubt, but far be it from me to associate with your presence here the sudden increase in the death rate of Albany during the last few days.

These medical conventions must necessarily result in benefit to all who attend them. Short periods, like these, with the strain and anxiety of practice laid aside must recreate the tired brain and body and send each one back to his daily labors refreshed and benefited by the conversations, the addresses and the experiences which start new lines of thought and by the application of some brother practitioner's ideas, lead to the solution of knotty problems which have arisen in the daily routine of practice. These meetings tend to draw the men of the profession nearer to each other and through newly discovered mutual interests cement them together. I trust the drawing together and cementing process is more wisely conducted and of a more permanent character than that attempted by a dorky doctor of whose efforts in that direction I once heard: "Alum to draw 'em together and rosin to cement 'em."

Of the three great learned professions, theology treats of traditions of past ages and speculates on the unknown future, law is bound in even links of precedent and offers no opportunity or incentive to reach out after new conquests, while the practice of medicine is an ever living issue which, though centuries old, is only now standing on the threshold of its wonderful future, looking forward to an illimitable expanse of unknown and untried territory where victories, more brilliant than those which already illumine the names made immortal in the healing art, spur every earnest and ambitious member of the profession to still more glorious achievements.

It is fitting that these conventions should be held in Albany, the capital of the state. The medical profession should endeavor to draw nearer to the executive and the legislator. Much that the profession wants could be easily gained if the physicians of the state exercised the tact and energy displayed by the politicians of the state. A great deal was accomplished in behalf of the medical profession, the health of the people and the general betterment of conditions, by Dr. Brush of Brooklyn, and his last work, the establishment of a home for consumptives in the Adirondacks, should receive the encour-

agement of the authorities of the state.

In advising you to look more closely to the welfare of your profession and the people to whom you administer through legislative and executive favor, I do not wish to be understood as asking you to bring grist to the Republican mill because that party is now in power. You can't get continuous help unless you spur both parties to your aid. If you get the support of one you are reasonably sure of the other. You know what the dorky said when he was asked why he only wore one spur and how he could make the old mule go with only one: "Lord, massa, I jes jabs it inter one side and makes that go and 'tother side has to go."

Most of you medical men are too conservative to make good politicians. We all commend your conservatism and I, particularly, take both pride and *profit* out of your tendency to stick to the tried and true through thick and thin, even to the utter disregard of the thicker and thinner. When the whole commercial world finds consolidation a necessity to success in business it is not to be wondered at that the medical profession finds the most highly concentrated a necessity to success in practice.

No public utterance would be complete at this time without some reference to the war with Spain. It is especially appropriate now and a source of great gratification to me to have the opportunity of paying a tribute, humble though it be, to the hundreds and hundreds of your fellow practitioners, who, without an instant's hesitation, left their homes and very means of support, to face unselfishly, privation, disease and even death itself that they might relieve suffering and save the lives of American soldiers and sailors to the everlasting glory of their profession and their country. There is no more touching or heroic incident in the history of the war than at Guantanamo when Dr. John Blair Gibbs, who had left New York on the Panther but a few weeks before, full of hope, and in the highest spirits fell, ministering to the wants of the wounded in the first engagement on the soil of Cuba. We revere his memory and treasure the heroism of all the profession who enlisted in the service of the United States.

Dr. Marie J. Mergler has been elected dean of Northwestern University Woman's Medical School, in place of Dr. I. N. Danforth, resigned. Dr. Danforth has been elected Dean Emeritus.

The yearly course at this school has been changed from one of two semesters to one of four semesters of twelve weeks each, commencing the first of July, October, January and April. Three semesters will be required; the other semester will be optional. The number of regular students will be limited to one hundred, twenty-five in each class. They will be admitted to competitive examination for place in class only after having complied with the requirements of the State Board of Health.

A PRESCRIPTION THAT WAS NOT "SUBSTITUTED."—An old-school physician, practicing in a small town supporting only one druggist of over scrupulous principles, wrote for one of his patients the following prescription:

R Spir. frumenti, q. s.

A. B. C., M. D.

Fearing that the druggist might hesitate to fill the prescription—it being Sunday—he added the following:

Please give the bearer the above named potion.
He's a pretty good chap and employed at the station;

The liquid he craves is known as Frumentum.
And the name at the bottom will tell you who sent 'im.

The letters "q. s." to be very explicit.
Is a medical dodge known as "quantum sufficit;"
But if a special translation you crave for,
It is simply this:—Give him all he can pay for.

—:O:—

Therapeutic Notes.

Among the many possibilities of the Dow Portable Electric Assistant (see illustrated advertisement on page xx), and one that will be appreciated by the profession when it is made manifest to them, is the fact that by the use of the electric needle, or a small electrode, with a so-

lanced, pressed out and cleansed: and different operations performed in the way of removing ingrowing toe-nails and finger-nails; or, as was the case a short time since at the Massachusetts Eye and Ear Infirmary, Dr. E. A. Crocker obtunded the drum of the ear in this way, and operated without having the patient's head held; and the Assistant is now in constant use in this hospital for these purposes. Furthermore, any antiseptic can be driven in after the operation has been performed. Cocaine applied without the use of the electric current as a carrier is of but very little use, as it does not penetrate to any depth. It can readily be seen that by this method many things that heretofore have been difficult are easily and painlessly accomplished by the use of this little electric current.

Several new instruments have lately been added to the Assistant, as follows: Two new cautery holders—one to hold the common stock cauteries, and one for the snare work—and they are so constructed that the operator can adjust the cautery to any angle he may desire. A new headlight has been added that can be used with a street current, without any additional resistance, thereby saving any loss of current; and the last addition is a flexible probe that will follow a bullet wound easily and will give an alarm when the bullet is touched. A urethral and vaginal electrode have also been added.

As a matter of fact the uses of the Dow Portable Electric Assistant are manifold; and if you would like to know all about it just drop them a postal card. Address, The Dow Portable Electric Assistant Company, 218 Tremont Street, Boston, Mass.

As a matter of interest we would add that the United States Govern-



lution of cocaine any part of the body can be anesthetized (without the often injurious and uncomfortable effects of ether or chloroform, and without the least unpleasantness to the patient), that abscesses can be

ment recently favored the Company with an order for a large number of the Assistants. This alone, it seems to us, is a sufficient proof that the Case in question with its many pieces of apparatus is of peculiar merit.

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THE DISINFECTION OF THE ALIMENTARY CANAL.

BY A. JACOBI, M. D., LL. D.,
NEW YORK.

An address delivered before the Medical Society of
the State of New York, Feb. 1, 1899.

WHEN considering the alimentary canal from any point of view, pathologic or therapeutic, we should begin by paying particular attention to the mouth. It is mainly endangered in the very young, and most of all in the newly born.

There are several reasons (mostly discussed by Rudolph Fischl in Volkman's clinical lectures No. 220) why microbes of so little virulence as not to prove dangerous to the adult should be fatal to the newly born. It is true the phagocytic reaction is but trifling in the newly born, his blood is less alkaline, there is but little tendency to fever, and his lymphnodes do not respond much to inflammatory irritation. However, some such protections of the adult, as expectoration or perspiration, are absent; that is why the intestines and the kidneys are the only eliminators. The hard part of the epidermis of the newly born is not developed according to Hulot, the epithelia are still of an embryonal character, and there is a copious normal desquamation of all integuments, both cutaneous and mucous. Thus, between the injured or partly lost epithelia, ample admission is secured to the nomadic tribes of untold microbes. That is particularly so in the prematurely born, whose tissues are still more of the embryonal type than those of the mature foetus. Thus it may happen that some of the pyogenous cocci which are

known to occur in normal vaginal mucus, suffice to infect a newly born. Not the least additional factor in causing danger is the symbiosis of schizomycetae with putrefaction-microbes, whose co-operation becomes particularly manifest in the infections which originate either in the umbilicus or in the mouth.

The newly born and the infant are left to the care of others, they cannot protect themselves. As they cannot expectorate, so they cannot gargle or wash. Their food when given hot injures epithelia; their mouth is washed and rubbed sore with a coarse cloth, dipped in unsterilized water, by unclean or septic fingers. Their very screaming, while pulling at the mucous membrane of the posterior part of the alveolar process through traction of the pterygoid muscle, induces local anæmia and rupture and necrosis of the mucous tissue, and causes the "aphthæ of Bednar," which, according to Fränkel, frequently harbor staphylococcus citreus. Malformations of the mouth, such as cleft palate, add to the recesses in which bacteria may find a nest. The slightest abrasions occasion the development of thrush, the oidium of which is capable of entering the oesophagus and the stomach, also the brain, the spleen and the kidneys. Food, air and fingers carry into the mouth lepto- and streptococci, pyogenes, pneumococci, bacteria coli and Klebs-Loeffler bacilli which are absolutely harmless—with few exceptions—as long as the surface of the oral cavity is normal, but enter the lymph—and blood circulation when a superficial lesion favors the admission of microbes. As long as no invasion takes place, no amount of microbes establishes the diagnosis of an infectious disease. That is

why our boards of health are apt to make mistakes and to shoot beyond the aim. For the responsibility they have in connection with the sanitary interests of the public, is quite liable to carry them too far in depriving of their personal liberty those who, like many, perhaps, of us here, harbor any number of bacteria in their mouths without being sick. With the exception of what occurs in the tonsils, on which the normal epithelia may be interrupted in their close juxtaposition, they do not enter the circulation unless there be hyperæmia, catarrh or ulceration. Such stomatitis and pharyngitis were always considered a *symptom* of an infectious disease; it is more probable, however, that they, particularly the adenoid organs, tonsils, etc., are the first to be infected and furnish the *inlets* of infection. That is mainly so, however, in later life, not in the earliest infancy; here the palatine tonsils are mostly still small and smooth, and are frequently and easily washed clean during swallowing. Later on, perhaps, influenza and measles, very likely scarlatina, rheumatism and erysipelas may take their origin in the nasopharyngeal cavity. Cerebro-spinal and other meningitis are known to have been occasioned in this way. Puerperal fever in the newly born, osteomyelitis and suppuration around a simple fracture have been observed under the same circumstances. In advancing years frequent attacks of pharyngitis, deepening of the lacunæ, and fistulæ dating from previous abscesses, give ample opportunities to invading microbes. During infancy, also during the diseases of advanced age which are complicated with unconsciousness, such as apoplexy, typhoid fever, or pneumonia, remnants of food remain in the recesses of the mouth, disintegrate and lead to irritation, inflammation and infection.

The œsophagus is not likely to be affected in a similar way. Still, twenty-five years ago I published the case of a small boy who had a stricture of the œsophagus from drinking lye. The autopsy revealed besides fibrinous bronchitis, diphtheria of the cicatrix.

To prevent microbic invasions the mouth should be kept clean. It

should be washed after every meal and at bed-time with water, or with a mild solution of borax or boric acid; those wearing artificial teeth should be particularly careful. A few drops of tincture of myrrh in a glass of water, or a solution of salicylic acid in 500 or 1,000 parts of water, or a mild solution of permanganate of potassium (1:3000-4000) is quite satisfactory. The regular use of a soft tooth brush, or of a coarse cloth, is fortunately a universal habit amongst clean people. The mouth of patients who are unconscious should be moistened at short intervals, the dry typhoid tongue touched once or twice a day with a one per cent. solution of nitrate of silver. The composition of tooth powder should be known, those containing strong alkalies avoided.

The use of chlorate of potassium is advisable in any case of incipient stomatitis. A solution of one part in fifty of water is mostly sufficient, but the internal use is often preferable in established and progressive cases. To have a speedy effect it should be taken internally at short intervals, every hour or every half hour; the dose should be held in the mouth a minute and slowly swallowed. The daily dose should not exceed four or five grammes a day for an adult, one gramme or less for an infant. If the latter is not to take it, a few drops of a two or three per cent. solution may be brushed on the mucous membrane. It should never be forgotten, however, that the persistent internal use of chlorate of potassium may prove dangerous. Since the first cases of poisoning published by me in "Gerhardt's Handbuch der Kinderkrankheiten" in 1876, and those reported by me to this Society in 1879, a great number of deaths from the same cause are known to have occurred.

Puny infants unable or unwilling to clear their mouths of food remnants should be given a teaspoonful or more of water after a meal. Washing of the mouth when considered necessary should be done with great care and not in the newly born only, for the reasons detailed before. No direct local application should be made to the throat; the force required for that purpose and the struggle on

the part of the little ones make it very inadvisable at least. The best way to get at the throat is through the nose and naso-pharynx, which is so often the seat of chronic catarrh, ulcerations and adenoids in the very young. The regular irrigations with warm salt water made by means of a nasal cup (better than spoons, droppers or syringe) are very beneficial. They clear the narrow cavities of mucus which cannot be otherwise removed and of foreign material which finds a ready access. Of that nature are tubercle and diphtheria bacilli, and saprophytes. One of our specialists objected some time ago to these preventive irrigations for the reason of their alleged superfluity. He said that nobody irrigated the stomach regularly, and as a matter of prevention, and what was objectionable in one cavity was so in others. He merely forgot that the stomach is not accessible to the atmosphere and dust of the street, that there is no highroad into the stomach for diphtheria, tuberculosis, and typhoid bacilli; that, on the contrary, they are destroyed by the normal secretion of the stomach.

The several diseases of the mouth and throat have their own indications. They should not concern us here.

The hydrochloric acid of the stomach has a germicide effect. Straus and Wurtz observed it to kill anthrax in half an hour, typhoid and cholera bacilli in from two to three hours. But they also found that the same amount of hydrochloric acid would act better in a test tube than in the stomach in which it is mixed with chyme or combined with albumen. Thus it happens that bacilli of typhoid may pass the stomach uninjured. That occurs mainly when the stomach secretes but little hydrochloric acid, for instance in hydræmia, in catarrh, or in achylia gastrica. Such conditions furnish at once the indication of administering hydrochloric acid, both for its digestive and its germicide action.

Fermentations occurring in the milk on which infants and children are fed have been studied very extensively. They occur so frequently as to explain the multiple infections of the infant intestine. Lactic fer-

mentation exhibits Pasteur's bacillus lactis, also staphylo- and pneumococcus; the fermentation of casein Duclaux's tyrothrix, leptothrix buccalis, bacillus subtilis and mesentericus, and others. Butyric fermentation is secondary to lactic fermentation, and is due to the presence of bacillus butyricus, which is found in milk contemporaneously with bacillus lactis, but remains latent until lactic fermentation is completed. It lives on the bacillus lactis, and at the expense of lactic acid when in excess. In connection with this fact the excess of milk sugar in infants' food becomes a very doubtful blessing. It may be known to some that these forty years I have constantly taught the advisability of avoiding that excess. Led by observations in the nursery and at the sick bed I have always taught that cane sugar, and not milk sugar, should be added to the food of infants, the milk sugar of the cow's milk being sufficient to supply the required amount of lactic acid.

Chronic gastritis, besides the best known symptoms, causes mental and emotional disturbances amounting to hypochondria. Gastric fermentation produces hydrogen and carbonic acid, which dilate the stomach and cause a diffuse (not a localized) pain. The irritated gastric nerves cause a disturbance of the nerve centers, with vertigo, severe headache and agoraphobia, and of the heart, with cardiac asthma, palpitation and arrhythmic pulse.

The stomach is very apt to be overloaded. As long as the small intestine is crowded the stomach is through reflex action prevented from discharging its contents. Before the Moscow Congress Dr. Von Mehring detailed the following experiment. The duodenum of a dog was cut and both ends fastened in the abdominal wall. When the lower end was filled with milk or other absorbable material, water introduced into the stomach would not leave it through the fistula. Two important clinical observations become thereby amenable to an explanation. The first is this, that babies who are crowded with otherwise appropriate and absorbable food, may die of marasmus; the second, that persistent constipa-

tion keeps the stomach filled with the ingesta, no matter of what nature, to the detriment of nutrition. The latter is in these cases impaired because of the nature of the stomach, which absorbs but very little besides solutions of salt in water, peptones and solutions of dextrin or of grape sugar, and alcoholic beverages. Water, for instance, is not absorbed in the stomach. When it is introduced into the normal stomach, it is expelled through a duodenal fistula, established for the purpose of observation.

Pepsin and rennet are secreted by the glandular cells of the pylorus and of the fundus; hydrochloric acid from the chlorides in the circulation of the surface epithelia; lactic acid is produced by the bacteric fermentation of the carbon hydrates contained in the stomach. When no milk sugar, or no other carbon hydrates are introduced there is no lactic acid. After a meal consisting of hydrocarbons there is lactic acid, however, only for some time, say half an hour; after this period there is hydrochloric acid. At first it combines with the salts it meets, at the same time it interferes to a certain extent with the transformation of starch and stops its complete saccharification. Its principal effect when in sufficient quantities, is the prevention of abnormal fermentation and putrefaction. These become prevalent when a gastric disease diminishes the secretion of hydrochloric acid.

In dilatation of the stomach, no matter whether the secretion of hydrochloric acid is wanting, diminished, normal, or excessive, mostly, however, when it is defective, the motory incompetence of the organ, which results in undue retention of the contents, causes fermentation. It produces lactic, butyric and acetic acids, and gases. Carbonic acid and hydrogen originate in the putrefaction of hydrocarbons, hydrogen and sulphid of hydrogen in that of albuminoids. The accumulation of ingesta may cause endosmosis of water into the stomach. That may lead to constipation, scanty urine, dry skin and desiccation of the muscles and the nervous system.

Tetany has been observed under such circumstances, partly from the changes in the physical structure of the nerve tissue and partly from autoinfection.

Tuberculous, typhoid, or other infectious ulcerations are rarely found in the stomach, because their bacilli meet hydrochloric acid during the few hours while chyme is forming. But a certain quantity of the acid in, and good motory power of, the stomach, beside a mere normal—not excessive—peristalsis, are required to prevent putrefaction in the intestine. In the colon this putrefaction is quite common, and proves the introduction of microbes with the albuminoids. All sorts of infectious deposits, besides putrefaction, are noticeable when the microbes are introduced in great numbers, when the secretion of hydrochloric is insufficient, when the motory power of the stomach is impaired, and when the resistance on the part of the pylorus is incompetent. It is evident that these wants should be corrected. Abnormal acids in the stomach should be neutralized by alkalies; the motory power of the stomach increased by strychnine, electricity, massage, and hydrotherapeutic applications (mostly cold); gastric catarrh relieved by occasional or regular irrigations; the insufficiency of pepsin by the administration of pepsin; the absence or lack of hydrochloric acid by its introduction in proper amounts of water, in a proportion of from 2 to 5 in 1,000; and by a fair amount of sodium chloride to all kinds of food, mainly to cow's milk and to farinacea.

This demand is more than merely theoretical. In thousands of cases observed by me, of indigestion caused by the presence of fat acid (while hydrochloric acid was absent, or scanty, or retarded), I have seen immediate improvement by giving both, alkalies from five to ten minutes before meals for the purpose of neutralization, and hydrochloric acid (correctly diluted) during and immediately after meals. From 8 to 15 drops of the diluted acid in a glass of water, mostly hot, will usually suffice. When hydrochloric acid is secreted or introduced in sufficient

or excessive quantity, pepsin may be absent. In those cases the latter should be given in addition.

To give pepsin alone, however, as a routine treatment, is rarely correct. For when it is absent the epithelia are no better developed than the peptic glands. Thus, while pepsin is given, it should be considered inert unless it meets hydrochloric acid in the stomach, or be combined with it. The wine of pepsin of the National Formulary, not yet admitted to the official Pharmacopœia, is composed on that principle.

Putrefaction which takes place in a stomach, which is weakened by muscular incompetency during anæmia, convalescence, dilatation, or by congenital muscular insufficiency, should be treated locally; there is no reason why the slow process of improving secretion and motory power should be relied on solely. It is in these cases that resorcin is obviously a reliable remedy. An adult may take from 1 to 1½ grammes a day, a baby from 4 to 10 centigrammes a day. If after a long search, as I have instituted it, you find a few reported instances of large doses which did not kill, there should be no temptation to give more than the small doses which I advise, and which prove successful. The effect of resorcin is the more speedy and local the greater its solubility, and the facility with which it may be combined with other drugs.

The choice of alkalies depends in part on indications other than that of mere neutralization. Bicarbonate of sodium will momentarily neutralize acids met with in the stomach, but it incites the secretion of hydrochloric acid, an excess of which may prove uncomfortable. It often causes a burning sensation. One of the principle objections to the bicarbonate may also lie in the evolution of carbonic acid. In the individual case it may be questioned whether its stimulating effect on peristalsis is preferable or objectionable when compared with the inflation of the stomach engendered by it. All carbonates have this disagreeable feature. That is why I prefer calcined magnesia, the "Magnesia" of the Pharmacopœia. It has the additional advantage of relieving

the constipation which is a frequent complication, and not infrequently a direct cause, of a putrefying process in the stomach. An adult will take from two to four grammes a day in from three or four to eight or ten refracted doses.

The irrigation of the stomach meets with difficulties in few instances only, with almost none in infants and children, in whom a catheter No. 25 or 30 French is sufficient. In the adult the post laryngeal region may offer an occasional obstacle, which, however, is overcome by patience. When the pharynx is too irritable, or the patient refractory, the tube may be introduced through the larger, mostly the right, nostril. When it does not readily pass into the œsophagus the patient should be made to swallow, when it will glide down. Salt water solution of 7:1000 may be run through it from a funnel or a fountain syringe which is slightly raised above the level of the pharynx, and lowered when the fluid and stomach contents are to flow out. This salt water may be mixed with a disinfectant, say thymol, 1:3000 or 4000, or in cases of hyperacidity with bicarbonate of sodium 1:200-500. The temperature should be that of the body when this is normal, somewhat or considerably cooler when there is a high elevation, or warmer when there is a reduction of the body temperature. Alcohol should not be added to the injection, because its dilution is partly absorbed by the stomach. On the other hand when water is injected without salt, it causes osmosis of the body fluids into the stomach sometimes to such an extent as to visibly increase the amount returning from the stomach. The irrigations should amount to 100 and more cubic centimetres in the nursling, 200 or 300 in the child, 500 or 700 in the adult. They should be repeated until they return clear. The tube should always be withdrawn quickly so as to avoid irritation of the fauces.

Bile is credited with antiputrid properties, which, however, are not possessed by it in its alkaline or neutral condition, but by the free, mainly the taurocholic, acid. As bile (mainly when exposed to air)

undergoes putrefaction very readily, the main object during life is to keep the function of the liver normal. Unfortunately whatever influence we may have over it can be attained only in the course of time. Neither salicylic acid, nor sulphate of sodium, nor calomel can be relied on in acute cases which require immediate correction or disinfection, except through their purgative effects.

When the acid contents of the stomach meet bile, a deposit is formed which is dissolved in an excess of bile and in the sodium chloride which is formed during the neutralization of the hydrochloric acid. These changes are, however, not uniform, inasmuch as the acid gastric contents, the alkali and acid of the bile, and the alkali of the pancreatic juice mix in different proportions.

In all probability the part taken by the pancreas in digestion and nutrition when fully appreciated will certainly be recognized more than formerly in our therapeutics. As a preventive the use of fats, cream, ice creams, fried foods, and excessive albuminoids — should be avoided. Mercurials appear to stimulate the action of the pancreas. Such stimulation, however is apt to become excessive, and the omission of mercurial overmedication (so common in former times) cannot but act favorably in the preservation of that organ. Still moderate mercurialization will always play an important rôle in its chronic inflammations of a sclerotic or of syphilitic nature. So will the iodides. Carcinoma of the pancreas either isolated or complicated, is in our times, unless it can be relieved by an operation, best treated by methylene blue, the effects of which in retarding or even diminishing carcinomatous growths in all the viscera I have too often noticed these ten years to doubt their reality. Pilocarpin, whose action on the salivary glands appear established, may be tried in small doses. The stimulation of the duodenal glands by alkalies and bismuth, may do good by stimulating their vicarious action. The physiological incompetence of the pancreas may be rendered partly innocuous by the administration of animal pancreas or pancreatin. The former appears more physiological,

for pancreatin is liable to be destroyed by the action of gastric acid.

In this way the absence of the function of this viscus which certainly is a factor in causing intestinal toxicity, may be shorn of part of its deterious effect. If not much of a curative agent in infection of the bowels, this method may become a preventive. There are, however, cases of pancreatic disease which show to a marvellous extent the self-help of nature. There are those, in which indican is diminished for the following reason. One of the functions of the pancreas is the transformation of albuminoids into peptone, and of this into leucin and tyrosin. When fermenting they form salol, phenol and indol. The latter is developed in larger quantities out of pancreatin-peptone than out of the albuminoids of meat; thus it appears that the peptic effect of the pancreatic juice (mostly trypsin) favors the production of indol. That is why *diseases* of the pancreas may remove the amount of indol and its product indican, to such an extent that even obstruction of the small intestine where an increase of indicanuria should be expected, the latter may be absent. (Leube.)

Another way in which nature appears to neutralize its own injuries, is suggested in the facts that the result of peptones and its putrefaction, the formation of leucin and tyrosin, works its own destruction. Amongst their final productions is phenol, a disinfectant. That is not only so in the normal, but surely also in the diseased intestinal tract. It struck me decades ago, and I suggested the notion in a foot note in my Treatise on diphtheria (p. 93) nearly twenty years ago, that the rapid recovery and improvement of the general condition for instance after typhoid fever, might be due to the large amount of disinfecting phenol and other substances evolved out of the toxic material of intestinal secretions and excretions.

The processes of fermentation and putrefaction which take place in the intestine, are least intense in the upper part of the gut, become more marked in the lower portion of the small intestine, and less so again in the lower colon after desiccation by fever has become more effective. In the duodenum and jejunum there

is under normal circumstances no putrefaction but fermentation only; albumin is not here decomposed by microbes, it is not, however, protected any longer by hydrochloric (which is no longer met with) but by organic acids. Whatever microbes are found in the normal small intestines, decompose hydrocarbons through the formation of ethyl alcohol and organic acids.

The putrefaction of albuminoids which takes place in the colon, differs from pancreatic digestion. The latter furnishes albumoses and peptones, lysin, lysatenin, proteinochrome, amino acids and ammonium. The putrefaction of albumin furnishes the same products but proceeds further to the formation of indol, skatol, parakresol, phenol, phenyl-propionic acid, fat acids, carbonic acids, hydrogen, carbonoxid, hydrogen sulphid and some others, all of which have been studied by Nencki, Baumann, Brieger and, Salkoski. Many of these products are of intense interest because of their elimination through the kidneys; some like the oxy-acids are not changed at all; phenol is absorbed directly, indol and skatol have to be oxidized and are passed as indican and ether sulphuric acids. Their quantity which depends upon the amount of intestinal putrefaction, determines the greater or smaller injuries suffered by the formerly healthy kidneys during the various putrid and infectious processes of diseases. Indeed the number of renal affections, from a slight and temporary irritation (with renal epithelium and hyaline casts, and a few blood cells) to a serious and incurable disease brought on by the absorption and forced elimination of toxins are very numerous. On the other hand it requires no theoretical demonstration that kidneys previously diseased are no fit eliminators and add to the original dangers, and finally that in every case of intestinal intoxication, excessive putrefaction, or infection the condition of the kidneys should be studied at once, and preserved in its norm, or if possible improved. Diuretics may often prove life saving.

Not only food but also albuminous secretions of the intestines and bile, undergo putrefaction by themselves; that is proved by the fact that putre-

faction takes place during starvation no food being present. It is only in the fetus with its entire absence of intestinal putrefaction that biliary acids and coloring matter are met with, undecomposed.

There are other facts which prove the occurrence of putrefaction in the intestine even in the absence of food or food remnants.

The gut is capable of forming excrements without the presence of food or food remnants. When Hermann separated a circular piece of intestine from its contiguity, it still became filled with a feculent mass. A thick conglomerate of epithelium is formed below a preternatural anus. The colon of a newly born contains frequently large masses of dry epithelia. Heidenhain found fecal masses consisting of epithelia and numerous nuclei originating in Lieberkühn's glands, in experimental inanition and during the absence of bile. A frequent instance of this are the masses of epithelia narrowing the lumen of the colon, which may be found in the intestines of many newly born.

Putrefaction inside the gut does not reach the degree of that outside of the body, for obvious reasons, which are mainly the presence of organic acids and the relative exclusion of atmospheric air. In the intestine the absence or diminution of absorption is also a powerful factor. There is the more putrefaction the more fluid there is in the interior. The quantity of food is also of much importance. Carbon hydrates interfere with putrefaction; so does, but only to a certain extent milk, more so however its fermented products, kefir, kumyss and matzoon. Thus both theory and clinical experience favor the exclusion of meats and the selection of farinacea and milk preparations as the nutriment of patients suffering from intestinal putrefaction.

But Schmitz excludes casein from the praise due to milk; that is another proof of the correctness of many previous observations of the necessity of diminishing, or of suspending it, in the food of sick infants or of invalid adults.

Free acids interfere with putrefaction, therein lies part of the ad-

vantage of hydrocarbons which furnish acids through fermentation; they co-operate with the acids of the bile. It appears a pretty well established fact that putrefaction may be corrected by the presence of acids in the upper, and the absence of water in the lower part of the tract. To the observation that absence of gastric hydrochloric acid led to increased putrefaction, has been added the knowledge, both experimental and clinical, of its correction by the administration of hydrochloric acid. Another indication for the correction of improper putrefaction and absorption of putrid material may also be found perhaps in diaphoresis and in astringents, such as gallic acid and those vegetables which contain it. Many observations point to the adjuvant effect of opiates, because of their action in limiting secretion; still, I hesitate to recommend them as a routine treatment. Indeed no treatment should be routine.

In many a case it may be doubtful whether a microbic or toxic disease in a distant organ may be the result of intestinal putrefaction, or not. Bacteria are but rarely found in the circulating blood, or lymph; thus embolic deposits can but seldom take place in this way. In the moribund, exceptions to this rule are met with, but in them the tissues and membranes resemble more or less those of the dead in regard to mechanical and chemical alterations. Fischl even claims that in the living the infiltration with leucocytes of the submucous tissue and a secondary inflammatory process caused by the presence in the intestines of microbes is rather a protection to the organism against the emigration of microbes from the alimentary tract. Still pneumonia for instance, has often been claimed as the result of such emigration of streptococcus, staphylococcus, bacillus pyocyaneus, or bacterium coli; so have cystitis and pyelitis. But the methods of research have been charged in many such cases as having been incorrect and unsatisfactory. It is mainly the examinations of blood that in the opinion of the critics, left much to be desired. It is particularly the method of examining the blood taken

from a finger which is considered inaccurate, because it is thought to be impossible to sterilize the surface and the ducts of the cutis with any amount of alcohol and ether, and it is claimed that the blood to be employed for a conclusive examination should be taken from a vein. Fischl claims that of many such cases of general sepsis induced by enteritis only those described by Escherich, by Hirsch, and by Libman are worthy of confidence. Thus, after all, there are certainly some instances of a general microbic infection originating in the alimentary canal that are not doubted at all. On the other hand, it is possible as it was suggested forty years ago by Ritter von Rittershayn, that when a septic enteritis and a pneumonia or another infectious disease are found side by side, all of them may result from a common septic, or septico-pyæmic source.

On the foundation of 194 papers and essays which he quotes, and of his own research, E. Opitz (*Zeitsch f. Hyg. u. Infect.* xxix, 1898), arrived at the following conclusion: That the intestinal wall when normal, is not pervious for bacteria, and that no bacteria are absorbed into chyle during digestion, though there be slight lesions of the internal surface. Even serious chemical or mechanical lesions permit the admission of bacteria into the circulation in exceptional cases only. Nor is there a proof of the entrance into the circulation of bacteria from the intestines. As far as the kidneys are concerned he came to the conclusion that they caused no physiological eliminations of bacteria floating in the circulation. The presence in the urine of bacteria previously injected into the circulation is explained, according to him, only by mechanical and chemical lesions of the blood vessel walls, and of renal epithelia.

I have presented all these facts or suggestions, which are taken to be the proofs against the alleged dangerousness of enteric putrefaction or infection, in order not to be reproached with claiming too much myself. But after all, what does it all mean? Of the clinical facts proving the existence of auto-infection

there can be no doubt in the minds of practitioners and clinicians. If the microbes of these infections are not found in the circulation, and in the distant organs, the cause must be something else. This something else is the toxin formed by the very bacilli.

Nor is this all. No amount of laboratory research of a negative character can nullify the merest clinical observation. In my own laboratory I examine the urines of 100 patients a week; no two weeks pass I am certain, sometimes no week, in which an otherwise normal specimen of urine, perhaps in some cases discolored by a trace of albumin does not contain bacteria, mostly of the coli order, enough to cause turbidity. This condition is not always complicated with serious septic troubles, sometimes with none at all. But still, there they are, and must come from somewhere. Spontaneous generation does not exist, and immigration is the only explanation. These are facts, and as it has often happened previously, when they were proclaimed to be impossible, the theory will be found to require modification, not the facts. Those bacteria come mostly from the intestines, rarely from outside through the urethra. Let me show you how that may, and probably does, occur.

The practical conclusions are obvious. Disinfection must be resorted to.

Living tissues do not act like test tubes or like dead membranes. The latter are pervious according to the simple laws of diffusion and osmosis; not so the former. Even the epithelial cell is an independent organism with an active contraction like an amoeba, and with independence in regard to absorption. Fat molecules for instance enter the lymph ducts, but molecular pigment is rigorously excluded. In the intestinal epithelia of cold blooded animals movements and changeable processes, like feelers, in and out, backwards and forwards, have been observed equal to those in amœbæ. Indeed all differentiated cells choose what they wish to absorb, for instance the epithelia of the mamma or other glands which select their proper food or constituent.

Disinfectants have sometimes been considered inopportune or contraindicated because they cannot be given in sufficient doses to destroy bacteria or toxins. It is true that it is easier to destroy the living cells of the organism than bacteria. Not many years ago, however, Prudden proved that a one twentieth of a one per cent. solution of carbolic acid would annihilate the action of bacteria, not indeed by killing, but by paralyzing them. Charrin followed him lately. To prevent them from evolving toxins is as beneficial as to destroy them. This is true of such internal remedies as clinical experience found to be indicated in those cases which are evolved out of, or are complicated with the different forms of enteritis or entero-colitis. Vaughan believes that much harm and no good can be obtained from them—perhaps he speaks of injurious solutions only—but every clinician knows that the eminent bacteriologist is mistaken. It is true that calomel, naphthol, naphthalin, salol and camphor in medicinal doses do not diminish the number of bacteria, nor even of saprophytes, but the microbes become less virulent. "By their fruits ye shall know them."

I advise practitioners not to be exclusively guided by statements coming from those who while being expert and recognized bacteriologists have less clinical experience. In the test tube they obtain results which do not agree with other positive observations. They cannot, and sometimes do not, weigh the difference between a dead test tube and the action of the living cell. I cannot but ever insist upon the fact that a number of well observed and regulated clinical facts have the same dignity that is attributed to the results of microscopical and bacteriological exhibits. Both may be delusive or conclusive. When it is stated that disinfectants have not even an effect on putrefaction which is going on in the dilated stomach though the latter be within reach and accessible, we know that this plea is erroneous. In the same way it has been claimed that intestinal putrefaction cannot be influenced. That is also a mistake. A number of years I have treated typhoid ulcerations and their

offensive discharge with naphthalin. They were so readily disinfected, their fetor annihilated, and the character and number of the stools improved, that many seasons I made its administration a routine treatment. The same favorable result I often attained in the discharges of the tubercular intestine. In all such cases it is true however, that the effect is modified by the quantity and quality of the contents, by the rapidity of expulsion, by the resisting power of the intestinal bacteria and by the slowness or rapidity of absorption. It has been claimed, that bacteria and their toxins are liable to be beyond reach because of the facility with which they enter the tissues of the intestinal mucous membranes. Now we are aware that we cannot reach, improve, or cure every case, but also that remedies may follow in the same tracks opened by the enemy. The result will depend on the quantity of bacteric or toxic material which can still be reached.

Remedies which are to act as disinfectants of the intestines, must be able to reach it. There are some that are known to pass the stomach undissolved, for instance salol, salicin, naphthalin, and others. Many writers who are very doubtful in regard to other drugs, admit these mentioned may be of service. To permit soluble preparations to pass the stomach and to exhibit their effect in the bowels, they have been covered with keratin which is not dissolved in the gastric acid, or by other material of equal repute. I advise to try every such preparation for its merits, at least for its solubility. Many of them I have experimented with by exposing them to water, salt water, or acidulated water, and found them insoluble; before I did so, I picked many of them out of the discharges of my patients. They withstood both stomach and bowels, as if they had been so-called sugar coated pills. And many will be the disappointments of practitioners who are so good natured or confiding as to rely on claims not substantiated.

The soluble disinfectants whose action is said to be limited, or nearly so, to the stomach only, are more serviceable than they appear to be. Their solubility does not prove that

they do not reach the intestine. This latter assertion was based on the belief in their absorbability while in the stomach. This organ, according to Meltzer and other physiologists, absorbs but little, the soluble disinfectant is carried down into the intestine with the rest of the gastric contents; moreover the effect of tincture of iodine, or the iodine in its combination with iron, or of resorcin is well established. It is mainly the latter which is very reliable though in the test tube its anti-fermentative action is no greater than that of chloral hydrate or nitrate of silver, and certainly inferior to menthol, thyme, beta naphthol, or salicylic acid.

Next to a thorough discharge by purgatives of the infected contents in its efficacy in intestinal putrefaction, and in secondary infection of the organism (partly through the general blood and lymph circulation, and partly through the kidneys), stands the improvement of the surface of the mucous membrane. Like chlorate of potassium which by healing stomatitis prevents cocci or bacilli from entering the circulation in the mouth, so tannin, or better gallic acid which is tolerated in large doses—from 3 to 6 or 8 grammes a day by adults—bismuth subnitrate or subgallate, tannigen, tannalbin, or nitrate of silver improve the condition of the mucous membrane and its epithelial cover so as to limit absorption.

During gastro-intestinal infection or intoxication the first indication is prevention by withholding or changing the food. Being taught by example and experience I have not feared to deprive patients suffering from the vomiting and diarrhoea of gastro-intestinal infection of food for many hours or a day. Food introduced and brought up again, and causing hyperperistalsis and new infection is worse than food withheld. Of equal importance is a change in the selection of food. Acid (lactic acid) dyspepsia requires (egg) albumin water, albuminoid putrefaction in the colon demands farinaceous food. Milk must be withheld in these acute cases. Give no sterilized or pasteurized milk, no breastmilk. As I but lately said in an article on

cholera infantum in the *Twentieth Century Cyclopaedia*, under ordinary circumstances milk feeds babies, under extraordinary circumstances bacteria. None should be given until the discharges are no longer offensive. Small babies, or adults, may take a mild tea in drachm doses, or a few drops of whiskey in barley water may be given in short or longer intervals. A mixture which I used and recommended these thirty or forty years in the infectious diseases of the infant, when the period of vomiting and diarrhoea and starvation had passed by, consists of 150 ccm. of barley water, the white of one egg, one or two teaspoonfuls of whiskey, and some salt and cane sugar. Milk sugar should be carefully avoided in this condition. Of this mixture a teaspoonful is given every five or ten minutes.

Dyspeptic children are very apt to suffer from erythema as the result of intestinal infection or autoinfection, sometimes to such an extent that the diagnosis between it and scarlatina may become doubtful. The difficulty grows in those cases in which the intestinal erythema is attended by a corresponding fever, which is not at all an uncommon occurrence and is frequently mistaken for malaria. Constipation, which does or does not accompany dyspepsia, may in rare cases, lead to the same result. The diagnosis of the condition is not always easy for such reasons as the apparently normal condition of the stomach, the absence of diarrhoea, and the actual or alleged absence of flatulency. This erythema is frequent; it may last hours or days, or alternate with acute attacks of urticaria. The latter is, therefore, not always gastric or neurotic, but may be toxic, and thus share the etiology of many cases of acne and senile pruritus. When in the face, it may be mistaken for erysipelas.

This variety of erythema is sometimes seen on hands and feet, is symmetrical, and now and then, like urticaria, has vesicles or bullæ, sometimes in the shape of herpes iris. When it accompanies intestinal infection—either imported or indigenous, it is usually accompanied by indican and the ether sulphuric acids in the urine which is liable to be very

scanty and of high specific gravity. Skatol and indol are found in the feces. In most cases a purgative will bring instant relief—calomel is the best—but a lasting improvement will only come from protracted disinfection of the intestinal tract by naphthalin, salol, resorcin, oil of peppermint, small doses of calomel or bichloride of mercury, from large enemata containing $\frac{1}{16}$ p. c. of thymol, $\frac{1}{16}$ p. c. of permanganate of potassium, or from such as consist of aromatic infusions (catnip, mint, chamomile,) from occasional purgatives, and from the regulation of the diet which should be so arranged as not to cause fermentation and putrefaction. The sulphides of sodium and magnesium have disappointed me. Menthol should not be advised; it can be taken however by older children or adults, but in capsules only. It has a local irritant effect and has no properties not possessed by other drugs.

The practice of giving anti-fermentatives has proceed its theory for centuries. Still the theory is not quite so recent as some believe. In a paper on the "Treatment of infant diarrhoea and dysentery" published in the *American Journal of Obstetrics, etc.*, 1876, I made the following remarks: "One indication is to destroy ferments. For that purpose most metallic preparations will do fair service. One of them is calomel—as to its effect an anti-fermentative there can be no doubt—possibly it acts by a portion of the drug being slowly changed into the bichloride of mercury."

"Alcohol certainly arrests fermentation. Sometimes, particularly when the stomach cannot be relied on, the salicylate of sodium may be added to the internal treatment. The salicylic acid may prove beneficial, both by its antifebrile and disinfectant action." In my "Intestinal diseases of infancy and childhood," Detroit, 1887, I recommended calomel, bismuth, alcohol, creasote, salicylate of sodium and resorcin.

Irrigation of the intestinal tract is performed while the patient is on his side, with raised hip. The nozzle of the irrigator (fountain syringe) or of the tube connected with a funnel is introduced a few centimetres beyond

the internal sphincter or much more. In the adult, with a normal sigmoid flexure, a tube may be introduced from 20 to 40 centimetres; but many reports of long distance introduction are to be accepted with caution, for a stiff tube is liable to raise the intestine and may be felt in the hepatic region, while a flexible one is liable to turn upon itself. That is particularly so in infants and small children in whom the sigmoid flexure is multiple and can rarely be passed by an instrument. In them, as in most adults, the raising of the hip, may be successful. In some cases it is advisable to raise the lower half of the body according to the method I have followed these thirty years to reduce intussusception; in these cases I raise the bodies considerably and support the abdomen by a soft pillow while the face is turned to one side to facilitate respiration. While the anus is firmly closed the liquid is allowed to flow in from a slight elevation, from 10 to 50 centimetres. A greater elevation raises the pressure to an unbearable point. A slight elevation will improve the tolerance of the intestinal tract which may thus be filled to the ileo-cecal valve, and beyond. In rare cases the very stomach was reached. It is only an abnormal intestine, dilated in places, or bound down by previous adhesions, or abnormally sensitive, that resents the flow of the liquid by spastic contractions, or pain or vomiting. The indication of a greater or smaller elevation is guided, in special cases by the object, or objects to be attained. Part of the liquid is absorbed, and quickly too sometimes. That is why when that is not desirable, the irrigator should be raised. Then the intestine fills up more rapidly, and the return of the fluid, with the contents of the bowels, is more rapidly secured. From 1000-2000 or more cubic centimeters may thus be introduced into the bowels of an adult with the result of a thorough cleansing. Tepid or cool water should be chosen in those cases in which there is hyperthermy, such of the body temperature when this is normal, hot water when there is hypothermy with or without actual collapse.

Medicinal agents may be added to the water. Besides salt to form a

physiological solution I recommended subnitrate of bismuth in dysentery. In typhoid fever and tuberculous and other ulcerations thymol 1:3000-5000, or permanganate of potassium in the same dilution have a good effect. Bicarbonate of sodium 1:100-500 has served a good purpose when the secretion of mucus was excessive, less however in membranous enteritis than in the usual form of catarrh. Such irrigations may be repeated a number of times daily, according to necessity.

ALBUMINATE OF IRON.

BY L. H. WATSON, M. D.,
CHICAGO, ILL.

AT LEAST one drug has stood the test of time, and physicians of our day are using the same medicine used by Hippocrates and Galen.

Even in prehistoric times we are told of the use of iron. In the dim ages of the past, the fable runs, Iphicles appealed to Melampus, a physician, for a remedy for impotency. Melampus' advice was for him to procure a rusty sword, scrape off the scales, put them in good wine and drink it at his meals. Not a bad prescription that for modern times!

No drug has been better advertised than iron. "Beef, wine and iron" is the Shibboleth modern pharmacists conjure with. The lay public, always credulous, delights in the sonorous sound of beef, wine and iron. It represents to them health, strength and vitality. The merit of iron as a medicine has never been questioned by physicians, but we have learned much from modern research in regard to its use, and much in regard to the combinations which gives us the best results.

Iron exists in the body in the form of an albuminate. Physiological chemists tell us that when iron enters the stomach it is not fitted for resorption unless in the form in which it exists in the body of the foetus in utero, an albuminate. "It is quite probable," says the *American Journal of Chemistry*, "that iron is quite generally present in the animal tissues in connection with nuclein compounds," but its existence in hæmoglobin is noteworthy, because

it has long been known, and because the important property combining with oxygen seems to be connected with the presence of this element. According to analyses made, the proportion varies somewhat in different animals from 0.335 to 0.47 per cent. In the circulating fluid we find three proteids, fibrinogen, serum globulin and serum albumen. Serum albumen belongs to the group of native albumens, and the source and origin of the iron supply we find in the body, is the proteid substances of our food. These proteid substances transformed into peptones and proteoses, go to form serum albumen, the main source of tissue nourishment.

Bunge, speaking of the therapeutic action of iron compounds, says—referring to the important part played by hæmoglobin in the animal economy—"it is very improbable that iron in the form of inorganic salts introduced into the body, becomes converted into hæmoglobin by synthesis." Although the absolute amount of iron in the system is very small, not more than three to four grammes, its presence is essential that proper oxygenation of the tissues and metabolism takes place. Iron is not alone found in the blood, but in the liver, spleen and kidneys.

The liver particularly has a certain amount of hæmatin stored away, which partially supplies any waste of the hæmoglobin. Feeding iron in large quantities does not increase the amount found in the urine, says Forster, *Zeitschrift für Biol.*, 1893. He fed a dog 38 days with washed meat containing 0.93 grammes of iron and recovered from the fæces 3.59 grammes. Here was a loss of 2.66 grammes from the body, although iron was fed. There was none in the urine, however.

Stockmann has shown that the amount of iron ingested each day in an ordinary dietary only amounts to from 6 to 11 milligrammes ($\frac{1}{11}$ to $\frac{1}{10}$ gr.), while the daily loss is as much. As the intake is so small a reserve is provided, as I have earlier said, by the liver, whose cells rapidly take up any excess of the metal when given in an absorbable form like an albuminate. Feralboid, for instance, of which the dose is ex-

ceedingly small, and perhaps as readily absorbable as any form of the albuminate on the market (the dose being $\frac{1}{4}$ to $\frac{1}{2}$ gr.), would furnish all the iron necessary without overloading the liver, or irritating the gastro-intestinal tract, which is a very important point in treating chlorosis, when there is usually gastric irritation; and it is doubtful if iron is absorbed by the intestines. So long ago as 1824 Wöhler advanced this opinion, and Kletzinsky, in 1854, experimenting upon himself, and finding in his fæces as much iron as he swallowed, concurred in it.

When organic iron is eliminated from the diet the hæmoglobin falls rapidly, but the red corpuscles are not diminished in number, although, as in chlorosis, there are many pale, nucleated ones.

The liver takes up any excess of the metal. Zaleski and Vay showed that the iron arrested by the liver combines with the nucleo-albumens and can only be separated by incineration; and Bunge has shown that artificial peptic digestion of the yolk of eggs yields a nuclein containing iron. As the yolk contains no hæmoglobin, and as during incubation no iron can enter from without, the iron holding nuclein must furnish the iron for the hæmoglobin of the chick. This nuclein he calls hæmatogen.

As iron is an integral constituent of hæmoglobin, and indispensable for the conveyance of oxygen, so also it is an indispensable constituent of food. In iron starvation iron is evidently eliminated, even though in diminished amounts. As the iron salts are but slightly absorbed from the intestines it is a question if this small absorption has any merchantable value.

The iron we use, the iron which furnishes the supply needed by the hæmoglobin, we gain through the food in the form of the proteids. In using iron as a medicine we must select one possessing as nearly as possible a form which resembles the hæmatogen of Bunge. We might almost call feralboid an isomer, so nearly in its physical aspect does it approach the form in which iron is found in blood and tissues. According to Cloetta (*Archiv für experimen-*

tale Path. and Pharmacin, 1897), the organic combination of iron with albuminoid matter is necessary to ensure its absorption. Ten dogs experimented on with soup, made of starch glucose and distilled water, were found to absorb the iron in the form of an albuminate, but not inorganic iron. We can only conclude from these numerous experiments made by leading physiological chemists that of all the iron compounds the albuminate is the best when iron must be given in case of iron poverty.

The great importance of maintaining a normal percentage of iron in the blood is best seen when the latter is diminished from any cause. In such cases we have anæmia and chlorosis. In chlorosis every function is disturbed. Profound mental depression often exists; the patient is disinclined to work, the muscles are weak the face pale and waxy; there is a "venous" hum in the neck. Slow, shallow respiration with active fermentation in stomach and bowels. When properly treated with iron all this changes. In most cases of chlorosis we find the gastric mucosa in a catarrhal state; washing of the stomach is often necessary before administering food and iron. It is readily seen that iron salts as ordinarily given will only increase the gastric irritation, and the iron will pass off by the bowels in the form of a diarrhoea, or obstinate constipation may be the result. We cannot be too careful in these cases of chlorosis to ascertain if there be any evidence of ulcer ventriculi. We may find our indigestible iron salts will cause more harm than we can readily repair. In these cases especially I use feralboid in doses of one-third of a grain. It is not astringent, does not irritate a sensitive membrane, and is readily assimilated. In all forms of oligocythæmia, then, feralboid will undoubtedly give us the nearest approach to an easily assimilable form of iron, when we can use iron, and the speediest results in renewing the lost hæmoglobin of the blood corpuscles.

Only recently I have seen its efficacy in a case of chlorosis. The young lady had previously been under my care and a continued use of

iron in various inorganic forms had not benefited her. The result of the use of iron albuminate was remarkable and at this writing the color is beginning to show itself in the cheeks and the weak, piping voice so characteristic of chlorotics is being replaced by a firm, steady tone. I can only conclude by saying: *Nullum ferrum nisi albuminatum.*

100 STATE STREET.

PRACTICAL POINTS IN THE MANAGEMENT OF SKIN DISEASES IN CHILDREN.

BY L. DUNCAN BULKLEY, A. M., M. D.

Physician to the New York Skin and Cancer Hospital, consulting physician to the New York Hospital, etc.

DISEASES of the skin may not be the most frequent class of affections which the practitioner is called on to treat, nor are they as a rule dangerous to life, but all will agree that they may at times be very distressing to the patient and often very bothersome to the doctor.

When your worthy townsman, Dr. Wile, wrote to me sometime ago, asking me to address this society, I made a memorandum of half a dozen subjects which I thought might be of interest; these I submitted to Dr. Wile, and from them he selected the topic of the evening as likely to be of interest to everyone—which is my excuse, in part, for the homely and practical character of what I have to say.

While the number and variety of diseases of the skin which may occur in human subjects is very considerable, over a hundred distinct names being found in most statistical tables of cases, those which are commonly met with in children are relatively few, so that our attention this evening need not cover a very large ground. The practical remarks will refer to (1), Eczema; (2), Syphilis; (3rd), Ringworm; (4th), Urticaria; (5th), Herpes Zoster; (6th), Impetigo Contagiosa; (7th), Nævus.

1. *Eczema*.—A very large share of all cases of eruption in children is due to this trouble, whose clinical features are undoubtedly familiar to all and need not be dwelt on here, but only some practical points connected therewith.

Eczema in very early infantile life, as in later years, indicates faulty nutrition. When it occurs in nursing infants attention should be paid to the mother as well as to the child. Sometimes it is owing to derangement of digestion caused by substances which the child has taken in addition to the breast milk, but quite as often it is due to a faulty milk, dependent on some error in the mother's health or diet. These should be very carefully gone over and regulated. The trouble may be due solely to anæmia in the mother, and a good course of iron and other tonics will at once improve the nutritive character of the milk and benefit the eruption in the child. Again the trouble may be dependent upon indigestion of varied forms in the mother, and very careful and rigid treatment of her will be necessary. In yet other instances the character of the breast milk will be altered by her diet, and quantities of tea, chocolate, or even beer, which are often taken for the purpose of increasing the milk, will act prejudicially on the infant. In these cases I insist on the mother taking milk only, and that alone and pure, one hour before each meal, and during the night.

When the child is a little older, and beginning to be fed, grave errors in nutrition may occur from the mode of feeding and character of the food given to the infant, which certainly tend to produce or to perpetuate the eczema. This is a very large subject, which cannot be fully entered upon here, and I will only mention a single point which I have recently emphasized elsewhere. This refers to the use of wheat, prepared in a special manner, which I have found of very great service in connection with the nutrition of infants with eczema. I will describe briefly the mode of preparation and use, which directions it is necessary to follow exactly, in order to get the desired results:

A small teacupful of the ordinary crushed or rolled wheat, or wheaten grits, is put in a pint of cold water, in a china receptacle of a double boiler, such as is used for rice or milk. This is placed on the fire at the time of preparing the evening meal and allowed to cook slowly for

two hours. It is then set aside, properly covered, and allowed to stand untouched all night. In the morning more water is added, and it is again placed on the fire and allowed to cook slowly for two hours more. It is then turned out on a fine sieve, and rubbed with the bowl of a spoon, more water being added, if necessary, until the soft portion is made to pass through completely. In this way a gelatinous, pulpy mass is obtained representing all the nutritive properties of the wheat kernel, which is readily mixable with water or milk, and which passes easily through the feeding bottle. This should be prepared thus fresh every day, and when the routine has been established it is not at all difficult to carry out, as I have verified in very many instances for a number of years.

The *rationale* of the process of preparation and the reason of the value of the resulting material are simple. By the prolonged cooking and slow heat all the soluble elements of the whole wheat are extracted, including not only the starchy and gelatinous portions but also the phosphates, and are made to combine in a thoroughly cooked mass, while the hard and indigestible fibrous matter, with the siliceous coat, is left behind on the sieve. But there is also an additional advantage found in the slow process of preparation, covering some fifteen hours, which relates to certain fermentative changes occurring over night, resulting in a partial digestion of the mass, which changes are checked by the second cooking in the morning.

When well prepared I have found this food very agreeable and most serviceable, and it may be freely given even to very young infants; diluted with water it is much superior to the barley water so commonly employed in connection with the milk given infants.

It would seem almost needless to caution you in regard to the diet of children as they are beginning to be weaned, and later, but I have continually observed such grave errors that I cannot refrain from a few plain words on the subject. First it must be remarked that the ordinary run of parents do not seem to know

or appreciate the necessity of correct alimentation in young and growing children, and it is continually necessary for the physician to investigate it, and to correct many errors. Even in those well educated and otherwise intelligent there often seems to be an entire lacking of judgement, or of will, to carry out proper dietary regulations, and the nutrition of the child is too often left to chance or to ignorant subordinates. In cases of eczema especially, therefore, it is very essential that the physician see to it that the child is properly fed, for without this all medication may be of little avail.

I will not take your time by entering on the very broad subject of the internal treatment of eczema, which is well detailed in the books,* but will only utter a caution against the routine and indiscriminate use of arsenic, which has relatively little power over the disease. It would surprise physicians if they could show how universal it is for the specialist to find that skin patients have received Fowler's solution, and that only, from the physicians who have previously treated them, and it would also surprise them to know how relatively seldom this is prescribed by those who know most about this class of affections.

The local therapeutics of eczema in children is also a large field, which can hardly be touched upon, but a few practical remarks may be of service.

Unless special directions are given to the contrary most persons caring for children with eczema will attempt to keep the diseased surfaces clean by repeated washing, and yet there is nothing more prejudicial to the skin thus affected. It is my constant order that no water touch the eczematous surface until I so direct, and it will often be weeks before I allow this to be done, and then in the most careful manner possible and at rare intervals, and with the most exact directions as to the subsequent dressing.

A word may be added in regard to the use of soaps, for, from the many kindly but impudent instructions so freely proffered by enter-

prising manufacturers, one would sometimes be led to suppose that some of the soaps offered were a panacea for this class of troubles.

A little knowledge is a dangerous thing, and the very little knowledge gratuitously dispensed by these would-be enlighteners of the profession, is often quite as dangerous, or at least attended with quite as unsatisfactory results, as are those obtained from a large share of the semi-quack remedies lauded and pushed, even by firms considered reputable.

Soap cannot cure eczema, and in my practice I make very little use of any of those which have been extolled of late years: for I have too often seen the harmful effects from them when used in other hands. There is a very popular impression that castile soap is peculiarly good in diseases of the skin, and unless otherwise directed it will often be used in these cases. Now castile soap is made with a soda alkali, and will often be found to be very irritating to an eczematous skin, and I constantly direct that it shall not be used; any good, pure, potash soap is better, and none answers the purpose more kindly than the Pear's soap, now unfortunately so widely advertised. The *sapo viridis*, or green soap of the Germans, either alone or in a tincture with half as much alcohol is often the best that can be employed.

Tar soap is especially thought to be efficacious, and under certain conditions does seem to be very satisfactory, but sometimes it proves irritating, and it certainly is not the curative remedy which some might imagine. Indeed very little reliance need be placed on the many medicated soaps of commerce.

It would be impossible within the limits of time proper to this paper to attempt to enter at all fully on the local treatment of eczema in children and a few more words must suffice before speaking of other more common diseases of childhood. It is well always to bear in mind the very abundant nerve supply of the skin and the very tender and delicate character of the skin in early life, as indeed at every age. Zinc ointment has been a boon to eczema, because it affords a simple and non-irritating

*Eczema and its Management, by L. Duncan Bulkley, A. M., M. D. G. P. Putnam's Sons, N. Y.

dressing in most cases, and the profession has done well to employ it so largely. But it is a relatively inert and ineffective remedy when used alone, although with certain additions it often proves of the greatest service. Ichthyol, two to ten per cent., and salicylic acid powdered, two to five per cent., in zinc ointment, are often most valuable in these cases. The old tar and zinc ointment:

R Unguent Picis 3 ii,
Zinci oxide 3 j.

Unguent aquæ rosæ 3 vi,
often affords the very best dressing possible, and, if correctly and faithfully applied, remains still one of the very best applications for eczema.

A word in regard to the method of making applications of ointment, especially to children, for we may be sure that they will not be employed exactly in the right manner, unless special directions are given. It is better, indeed, I find, in regard to very many things in medicine to expect that patients and attendants know nothing rightly in regard to the details of treatment, and therefore to give very full and explicit directions in regard to methods and mode of treatment.

To be effective an ointment should be kept in very close and constant contact with the part, and the common method of smearing the surface and then placing linen or other covering upon it seldom suffices for the proper treatment of eczematous surfaces, where the disease is at all severe. I have long advised that the ointment be thickly spread upon the woolly side of lint, cut to fit the diseased surface, and that it then be bound firmly on with gauze bandage. It is surprising to see how much better a suitable ointment works when thus correctly applied than when simply rubbed on the surface.

On the face it is not often desirable to thus bind it on, but it should be reapplied as often as it is at all disturbed, even many times daily.

I may mention a device for restraining an infant from scratching and tearing itself, which I do not think is as widely known and employed as it should be. This consists in the use of a small pillow case, with an opening at the closed end,

sufficient to admit the head being passed through it. This is drawn down upon the baby, and secured from being raised by means of a safety pin, between the legs. A few more safety pins suffice to secure the arms in place, at the sides, thus making it impossible for the child to reach its face, or even the other hand. It may seem a little barbarous, in description, but after employing this method in suitable cases for many years I can assure you that it is of the greatest service, and the little patient becomes accustomed to it very readily, and does not seem to dislike it more than many of the other restraints of childhood: many parents who have used it heartily approve of the method.

2. *Syphilis*.—Happily this serious disease is relatively infrequent, as compared with eczema, but it occurs frequently enough to warrant one being on the lookout for it: for grievous errors may result from failure to recognize it when present. Fournier has remarked that "nothing is so dangerous to its surroundings as a syphilitic infant," and no amount of care is too great to prevent the sad occurrence of innocent inoculation from such a source. Literature is full of instances where this has occurred, many of them in country towns, and I could narrate a number of cases under my personal observation where this has happened: these often occur in the most unexpected manner.

The syphilitic infant should, therefore, be most carefully guarded, and those surrounding it should be fully acquainted with the danger of inoculation. It is never right to allow a syphilitic infant to nurse from another than its mother, even if there are not active symptoms present, for one never knows how soon infectious lesions in the mouth may develop.

Since the very general introduction of animal lymph, vaccination syphilis has become very infrequent, but the danger must not be forgotten, as humanized lymph is also still used more or less. In times past veritable epidemics of vaccinal syphilis have occurred from this source, and these generally in country towns.*

*Syphilis in the Innocent, by L. Duncan Bulkley, New York, 1894.

In regard to the treatment of infantile syphilis little need be said, for the simple means used years ago remains to-day the best method of combating the disease; and that is by means of mercurial ointment, diluted one half with cold cream, rubbed into the body and kept applied on the flannel band. There is little danger of the child absorbing too much: a half drachm may be used night and morning. Iron and appropriate tonics are required later in the disease, and in the very late forms the syrup of the iodide of iron, even in heroic doses, proves most serviceable.

3. *Ringworm*. — This vegetable parasitic disease when it occurs on the body is a trifling affair, yielding with comparative ease to many good parasitocides. But when it attacks the scalp it may prove a serious disease, often resisting the most patient and intelligent treatment for months or even years. Those who have not happened to meet such cases will not understand the earnestness with which I wish to impress on you the idea that a case of ringworm beginning on the scalp should never be slighted: for when it has once attacked the deeper structures it resists treatment most annoyingly. During the past year I have been attending physician to Randall's Island, where there are at least one hundred and fifty of these cases, some of whom have been there under treatment for a number of years, so that I know whereof I speak.

Parents should always be made to understand the rebelliousness of the disease in this locality and to appreciate fully the danger attending other children associating with those thus affected. Children with true ringworm should never be allowed to go to school, for the disease is thus spread most insidiously; the New York Board of Health now wisely investigates for these cases and excludes them from the public schools.

It would lead far beyond our proper limits to attempt to detail the best treatment for these patients. I can only add that the treatment must be most rigid and faithful; the physician must give time and patience to the case and see that the proper treatment is diligently carried out,

for the parents will often do it in a slipshod manner, even with the best intentions.

The question as to the cure of ringworm of the scalp is always a serious one; that is, just when the patient is perfectly well and not liable to communicate it to other children. This is often a very difficult question to decide, even to one familiar with the disease.

Long after the diseased patch has reproduced good hair of some length there may be small stubs of broken and diseased hairs, or worse still, minute black spots, representing the ends of hairs broken off at the mouth of the follicle; these are yet filled with the spores of the vegetable parasite and are capable not only of auto-inoculation and the production of active disease in the patient, but also of inoculating others.

Cases should never, therefore, be pronounced cured and be allowed to mingle freely with other children until the physician is assured from personal observation that such diseased remnants of hairs are not present. Now this is often a very difficult matter to determine, and the proper examination of the scalp may take many minutes, some writers say half an hour. The hair should be carefully turned back with the blade of a forceps and all the surface searched with the aid of a lens. It is often necessary to leave a child without treatment for a while, in order that this may be properly done: then, if there are any suspicious hairs or stumps these should be extracted and examined microscopically. A case should really not be discharged as cured unless a second or even a third such examination has failed to reveal the presence of the parasite.

I know that all this will seem to some to be an unnecessary refinement of precaution, and it is undoubtedly seldom practiced. But these cases of ringworm are cropping out all the time, here and there, and they all come from a parasite which has in some way been transferred to the infected head. And experience has shown that multitudes of these almost-cured cases are allowed to go free, scattering the disease in schools, asylums, barber shops and among

their playmates, by the exchange of hats, brushes, etc. I have seen many cases where the parents have allowed children with abundant disease, of a most contagious character, to have their hair cut at a barber's shop.

4. *Urticaria*.—This is often a very annoying disease; but it is one which is not always readily recognized in all its phases.

Acute urticaria, nettle-rash, or hives, when it bursts out, with its characteristic wheals, from some indiscretion in diet, is easily recognized and commonly yields readily to appropriate treatment. But in certain cases there is only the indistinct history of itching, with restlessness at night and the wheals may be few and far between and the condition may often be prolonged for a very considerable period and prove very rebellious to treatment. Sometimes it will seem impossible to find any error in the diet or mode of life which is accountable for the trouble, and many remedies will fail to give relief to the annoying difficulty. I have no panacea to offer, nor indeed any startling suggestion to make. But I can only say that the cases are curable with sufficient careful study of the child's life and nutrition and the proper use of remedies: but too often the cases are neglected. It must never be forgotten that articles of food, such as oatmeal, which are perfectly healthful for many or most persons, will, from an idiosyncrasy, prove very irritating to certain individuals.

There is a variety of urticaria which often assumes a very chronic form which may very readily pass unrecognized: this the *urticaria papulatum*, also sometimes known as lichen urticatus. In this the wheal-element is relatively slight and evanescent and the principal part of the eruption seems to be the little papule which develops in the center. The child will scratch the body or limbs, and on examination there will be a few torn, red papules seen here and there, perhaps with long scratch marks, but none of the characteristic wheals of urticaria. But on careful questioning it will be learned that the lesions have been much larger, and a pretty distinct history of wheal development may be learned,

and on very careful examination the torn papules will be seen to be surrounded by a more or less distinct red halo, which marks the now departed wheal. These cases if neglected may last for years and are both the sign and cause of ill health, and may produce an untold amount of distress and annoyance to the patient and friends. There is yet another form of the eruption, the *urticaria pigmentosa*, which is so rare that I need not take your time in discussing it. Finally it must not be forgotten that in very rare and unusual cases urticaria may exhibit even vesicles and blisters, the *urticaria bullosa* of writers.

5. *Herpes Zoster*.—Zona, or shingles, is generally such a marked and distinctive eruption that there is no difficulty in diagnosis: but when of peculiar location or unusual distribution it is sometimes rather difficult of recognition, especially when it occurs around the head or neck. I have seen a number of cases in children where its nature had not been recognized. The one-sided distribution of the eruption should always excite suspicion and, if carefully examined, the groups of flat vesicles are generally quite characteristic. Although not very common the eruption may affect even very small children.

Great care should be exercised in not allowing the vesicles of zoster to be much disturbed or broken, for the eruption always does much better if they are allowed to dry down with the epithelial covering intact; when rubbed or torn the surface may ulcerate and not only leave undesirable scars, but also prove quite difficult to heal.

Upon the covered parts of the body I have only used a very simple form of dressing which I do not think is much employed. This consists in simply enveloping the parts, very tightly, in muslin, beneath which a dusting powder is plentifully applied; the powder consists of a little powdered salicylic acid and oxide of zinc, with starch and a trifle of codeia or morphine, if there is much pain. This is dusted very freely over the eruption and also on the inner surface of the muslin; the latter is then made to fit tightly over the affected part by means of safety pins or by

sewing, and if comfortable the dressing is left undisturbed for one or more days. By this means the vesicles are protected from abrasion, the friction of the clothing taking place over the muslin, while the powder prevents friction beneath it. This I have found to give the greatest comfort and satisfaction to patients and the method has, with me, quite supplanted all other methods for a number of years.

Although not relating exactly to herpes zoster, I want to mention an interesting cause of herpetic eruption which recently came under my care, which is very instructive.

A physician in a neighboring city, whom I had treated some years before for syphilis, which he had accidentally acquired by a chancre of the finger, contracted while attending an obstetrical case, and whose wife had also become infected, sent to me his little son, fifteen months old, with a curious eruption of vesicles, herpetic in character, about the thighs, pubis and abdomen, which had proved rebellious to all treatment for several months.

Although both parents had undergone efficient treatment for syphilis and had long been free from any symptoms, and the child had been healthy up to a year old, he naturally feared that the eruption might have something to do with the poison which had at the time very seriously affected them: but the physician who had treated the case had very properly not considered it specific and had used many remedies, in spite of which the eruption had persisted and increased for almost four months.

When first seen, Jan. 20, 1899, there were groups of vesicles, quite thickly set, over the inside of the thighs, on the penis, scrotum and pubic region, and also extending upon the abdomen. In places they were somewhat abraded and the whole eruption gave the child very considerable discomfort and evidently was wearing on its health.

Noticing the peculiar distribution of the eruption and its confinement to the regions indicated and the fact that there was no tendency to an eczematous development, even where the lesions were abraded, I felt con-

vinced that it was a herpes with some neurotic origin.

The prepuce was found to be long and the orifice contracted and the impression was given that there was adherence to the glans. I therefore expressed the opinion that the eruption was probably of reflex character due to preputial irritation and advised that the child be circumcised, certainly as the first step towards treatment. Three weeks later I received a note from his father, stating that the child had been circumcised three days after the visit and that the eruption had immediately improved, and that at the time of writing the child was entirely well from it. This was over a month ago and I should certainly have heard if there had been any further difficulty, as the father is a very intelligent physician and was a faithful patient and was seriously anxious in regard to the eruption on the child.

6. *Impetigo Contagiosa*. — This eruption is not a very uncommon one in children, but is not always recognized and often passes for an impetiginous eczema. The lines of demarcation between the two are not always very distinct, but with care the disease can generally be recognized. In *impetigo contagiosa* the scales and crusts are rather superficial or papery, sometimes preceded by flat, flaccid bullæ or large vesico-pustules. Although there may be considerable discharge and crusting, there is not the tendency to subsequent exudation found in eczema; moreover, there is generally very little itching. The lesions of *contagiosa impetigo* are very apt to appear about the ends of the fingers and also about the mouth and nose, with which they come in contact.

Perhaps the most important point in regard to making a correct diagnosis lies in the therapeutics of the eruption. While eczema will often prove stubborn and may require prolonged constitutional treatment, the eruption under consideration, being almost wholly local (although, naturally, occurring most readily in connection with lowered vitality) it yields to a special local treatment quite differently from eczema; consequently also the prognosis is very different in the two affections.

The local treatment which is commonly so promptly effective in impetigo contagiosa consists simply in the officinal white precipitate ointment, diluted with three times the amount of cold cream. It is often surprising how rapidly even quite an extensive eruption of this kind will disappear under the thorough and continuous application of this ointment.

7. *Nævus*.—Of all the miserable conditions, which do not endanger life, in regard to which advice may be sought, there are few which are more annoying to the physician than very pronounced cases of vascular nævus. I have very little to say in regard to the extensive and disfiguring cases of mother's mark, which are sometimes seen in children even soon after birth and which may increase more or less rapidly. Unfortunately, but little progress has been made in the way of checking their development and often efforts to remove them have resulted in what was really a much greater deformity.

I do not think that any thing should be done to them very early, indeed not until the case has been studied and the rate of increase is clearly understood. But, on the other hand, if the patch is not too large and the rate of increase is slight they can be removed and the increase checked by the judicious and careful use of the actual cautery, provided either by the Pacquelin apparatus or by an electro-cautery. In some instances electrolysis is of service if well employed, with several long needles thrust through the lesion and by it they can be made to shrivel and disappear.

I would like, however, to call especial attention to the very satisfactory results I have had in a number of cases from the very thorough surgical excision of the whole mass, especially when they are very well defined and very vascular, constituting what is better known as angioma. If in certain locations, where the skin can be drawn together well after the operation, the results are exceptionally fine and practically no scar is left, when it is well done, under perfect aseptic conditions; when it becomes necessary to use skin graftings, good results can yet be obtained and with less disfigurement than that re-

sulting from some of the other methods employed.

In closing this desultory paper, I have to apologize for its many shortcomings. It is much easier to write a long dissertation on a specific subject than to briefly present separate points covering many subjects, and I feel that in regard to each of those touched upon there is very much which I would have liked to say. But as I understood Dr. Wile, he wanted some practical thoughts, which might be of practical service to practical men in their daily life. I have endeavored, therefore, to speak from personal experience of matters which I trust may in some way be of value to some of my hearers. If I shall have aided anyone in overcoming, even in a slight degree, some of the difficulties met with in this interesting, but too often neglected, branch of medicine, I shall feel amply repaid for the effort made.

4 EAST 37TH STREET.

LITHÆMIA.

BY DR. ALLAN P. MACDONALD,
DANBURY, CONN.

THE MEDICAL profession is waking up to the fact that the uric acid diathesis is more of a factor in the causation of chronic ill health than has heretofore been taught in our text-books or medical schools. Uric acid is very sparingly soluble in the urine, and when from any cause it is formed in the tissues of the body in excess of the normal capacity of the kidneys to eliminate it, it becomes the cause of many diseases, which from the nature and difficulty of removing the cause, is the *bête noire* of medicine. In the grosser forms of disease under this head, such as gout and nephro-lithiasis, the diagnosis is easily made, but in some cases of dyspepsia, asthma, neurasthenia, nervous palpitation of the heart, muscular rheumatism and other obscure ailments, it is more difficult to arrive at a correct diagnosis and in a large proportion of cases require a microscopical examination of the urine.

All cases of the above-named diseases do not have uric acid as an

etiological factor, and if the physician is not on the watch for the uric acid, it will not force itself on his observation.

The treatment of such cases with homeopathic remedies on homeopathic indications, has not been a brilliant success in my hands. I have never succeeded in correcting the morbid physiological chemistry, which is at the bottom of the difficulty with medicines, neither has any diet been more than palliative, so that I was forced early in my professional experience to have recourse to the best solvents then known or recommended. In this direction my success was not satisfactory.

As a last resource, up to a few years back, I was forced to the expedient of flushing the system with as copious draughts of hot water as my patients would take. In some cases this last named treatment was quite satisfactory. In women especially I find that they drink so little water that the physiological functions of the body have scarcely enough water to do their work properly.

In the last few years uric acid solvents of greater merit, like piperazine and urotropin have been introduced to the profession, and within the past year, a newer one—thialion—has come as a candidate for professional favor. The first two are quite expensive, the latter quite moderate in price, and from my experience with it, bids fair to become a valuable remedy in this condition. In looking over our literature on this subject, I regret to say that I do not remember any recommendation of the rational treatment of this condition with solvents. I can say that in the last six years, with the newer and better class of uric solvents, I have succeeded in getting better results for my clients than I did prior to that time.

The treatment is palliative, but you have the satisfaction of knowing that you can keep your patients free from distress, and at the same time prevent the deposits of the acid in localities where it may become the nidus of some organic disease. How many valvular diseases of the heart, how many apoplexies are due to the deposit of this substance on the valves of the heart, in the walls of the arteries? We frequently see calculus

in the kidneys and the bladder as a result, which if not removed, will end in great suffering and early death.

CASE I. Mrs. H., aged 41, had been suffering for eight years from headache, flatulency, palpitation of the heart and irregular and intermittent pulse, a combination of symptoms which always produces great anxiety and distress of mind, which is hard to control. She consulted quite a few of our local physicians and two eminent members of the profession in New York. All assured her that her heart symptoms were due to indigestion, but no remedies directed towards the cure of this disease gave her any relief.

Early in September last the case came under my observation. I made an examination of her urine and found an excess of uric acid. I placed her on lycopodium and thialion. She took one teaspoonful of thialion in hot water, half an hour before each meal for two days, till the urine became alkaline, after this, once a day, before breakfast, for two weeks. At this period, finding her very much improved, it was continued every alternate day. She was dismissed completely relieved of all her symptoms about the first of January.

This was the most brilliant cure I ever saw in any similar difficulty. Although the uric acid tendency is still present, to all intents and purposes it is a cure and I cannot but give the credit to thialion as the factor in bringing it about, by eliminating the excess of uric acid from the blood, where it acted as a toxine, reflecting on the heart and other organs implicated.

CASE II. Mrs. A., aged 49. This patient came under my care three years ago. She had intermittent attacks of headache, neuralgia, muscular rheumatism and bronchitis. One time it would be one of the above, another time it would be another. Sometimes she would have two or more in combination.

I saw her on an average of once a week during the three years she was my patient, from one or another of her ailments. In the last part of September, I examined her urine and found an excess of uric acid. I

placed her on thialion as in Case 1. She improved immediately so that in over two months she has not had a single attack of headache, neuralgia, rheumatism or bronchitis. In January she passed through an attack of uncomplicated gripe without trouble.

Here is a case of a woman who has been ailing for about nine years from various symptoms which were undoubtedly due to the toxic action of uric acid, who had homeopathic treatment directed against her various symptoms for the whole period without practical benefit, became practically a well woman after the exhibition of thialion for its solvent power over uric acid.

ON PHYSICAL EDUCATION.

BY C. P. ROBBINS, M. D.,
WINONA, MINN.

Member Winona County Medical Society; Southern Minn. Medical Society; State Medical Society; American Medical Asso.; Late Assistant Surgeon, P. B.; N. H. D. V. S., etc., etc.

ARTICLE IV, "CLOTHING."

"We sacrifice to dress, till household joys and comforts cease.

Dress drains our cellar dry and keeps our larder lean;
Puts out our fires and introduces hunger, frost and woe,

Where peace and hospitality might reign."

SINCE man has emerged from the primal state and extended his habits throughout all latitudes and climates, the question of clothing as a protection against cold and warmth becomes an important factor to maintaining healthy conditions. What to wear and how to wear it, aside from its social and aesthetic sense, has an importance second to none in its practical bearing. Among the material used are cotton, linen, jute, wool, silk, leather and rubber.

The fibers of cotton are exceedingly hard, wear well, are very absorbent of moisture and conduct heat less rapidly than linen and more rapidly than wool. Its advantages are, its cheapness and durability.

Linen consists of finer fibres, absorbs moisture better than cotton and is a better conductor of heat. Jute is largely used in the adulteration of fabrics and absorbs heat and moisture better than cotton.

Wool is a bad conductor of heat and a great absorber of moisture. Its hygroscopic properties being double that of its own weight. These two properties, which it possesses, make it the most important material used as an article of wearing apparel. During perspiration the evaporation from the body surface is rapidly taken up by its fibers, thus reducing heat by hastening heat radiation. So also, being a bad conductor of heat makes it the most important substance to retain body heat during cold weather.

As a protection against heat and solar rays, color is as important as texture. White is the best color, then gray, yellow, pink, blue and black follow respectively. As a protection against cold winds and cold, leather and rubber take the first rank. As regards absorption of body perspiration, wool stands first, and cotton last in amount absorbed.

As regards absorption of odors, color and texture are the essential conditions. Black first, then blue, red, green, yellow and white, follow in respective succession.

Texture depends entirely upon its absorptive properties. Wool standing first in order. As a protection against miasmata, so great an authority as Combe, from personal experience in the East Indies, has favored flannel.

Clothing is favored by age, habits and peculiarities of constitution. In childhood warmth is most essential. Children lose heat rapidly, partly because the circulation is more rapid than at any other period of life. Thus more blood comes to the body surface and more heat is lost, but mainly because in children the body surface has a greater area in proportion to its bulk or contents, than in the adult. To explain: if two cubes are taken with sides on one sq. ft. and two sq. ft. respectively it is evident that the smaller cube exposes a surface of six sq. ft. and has a bulk of one cubic ft. or a surface to bulk as six to one. The large cube exposes a surface of twelve sq. ft. and has a bulk of a little less than three cubic ft. or surface is to bulk as twelve to three or four to one. The same is true when applied to cylinders which more nearly resemble the human

body. Consequently having a larger surface exposed to bulk contents, than any other period of life, heat radiation is greater. Thus demonstrating that children must be kept more warmly clothed than adults. Woolen fabrics have proven the best and the greatest care should be exercised to see that the legs, arms, neck and chest are well protected, as a chilling of any part of the body in childhood is more susceptible to impression than in middle life. In middle life the wearing apparel is so varied, depending so much on social conditions, esthetics and circumstances that it will be well to point out the general principles.

The head dress is used for protection against cold, wet, heat and light. It must be as comfortably light in weight as is consistent with durability, and must not press too much upon the head or too close upon the hair. Air should freely circulate over the head. In relation to heat and cold, the head dress changes but the principal remains the same.

In winter and northern latitudes, the fur cap is used extensively, more for a protection to the neck, ears and sides of the face, than for the top of the head itself. Nature has well provided for the top of the head with hair. If we stop to consider how the face is exposed to all extremes of temperature and yet nature has adapted itself to such exposures and when we also consider the tissue here is as delicate to external influences as other places on the body surface, we can at once conceive that habits and custom have influence over head dress. In the head creation of the fairer sex from the rose leaf bonnet to the picture hat are more an article of beauty than for comfort or health. In men the opposite extreme occurs in the too close fitting head dress or one with no ventilation.

Regarding the clothing of the body and extremities we find the outer and under garments essential factors. In this climate where the changes of temperature are so varied, the best plan would be to confine our under clothing to the medium weight and have outer clothing suitable to the season or weather. Wool is by far the best as under clothing,

and since there are so many weights and such soft textures manufactured these may be worn the year around. In summer wool absorbs the body moisture and thus hastens heat radiation. In winter, wool being a bad conductor of heat, when surrounding temperature is severe, it harbors body heat and prevents too much radiation. Not alone this, but from a hygienic standpoint the perspiratory glands assist in the elimination of effete materials and in using wool next to the skin it takes up the perspiration and prevents a constant soaking in our excreta. The outer clothing may vary with the season or localities and the variety is so great, depending on season, locality, temperature, race, sex, age and peculiarities, that principle is more important than any particular case.

In summer and southern climates the cottons and linen are chosen as outer garments for comfort and health. In winter and northern climates the heavy wools are used and are best adapted.

There yet remains the foot dress to which little heed is taken and yet is by far the most important, when we pause to consider the surface exposure for heat radiation. In the action of walking the foot expands in width and length. In length as much as 1-10 and more in breadth. The shoemaker measures and allows 1-24 increase in walking. It is evident that attention to expansion is not unnecessary when we know the great injury inflicted upon the feet by the distention of the toes, their over-riding, ankylosis and callous both soft and hard. Few have not experienced some one or all of these. Their least adaptability to scant covering from the constant cold pavements, dampness, etc., should make us careful for the better protection. This evil is partly remedied by thick soles but mainly by warm stockings.

Our English cousins teach us one source of catarrh remedied by discarding the thin stockings and paper covered soles.

The amount of surface exposure makes them excessive radiators of body heat. The feet should be as warm as any other part of the body, but cold feet instead of being an

anomaly with the masses and classes is almost an unnaturally natural condition.

Such is the general outline of clothing of the adult and although these principles are applied to every age in a way more are applied for old age. The body surface in this period of life must be kept warmer as the circulation is feeble and languid and the function of heat production and regulation less effectually performed than before senile decay commences. Consequently if the body is chilled the restoration to normal heat is slow and the vital functions are dangerously depressed. Our aim should be to prevent its rapid radiation of heat by having the aged wear wool heavier than adult life and as heavy as that of childhood.

The hygienic choice of clothing, when not interfered with by conventional or economic factors, is usually by thumb procedure. This is especially true in our changeable climate when every extreme of temperature is experienced often within a few days or weeks and in some locations every day. The result is a sacrifice of comfort and health and even human life. The popular idea of hygiene is ordinarily that it concerns diet, water supply, drainage, etc., and the subject of clothing is the last that will occur to us. In fact the error is augmented by the importance attributed to these other conditions. As if clothing should be taken for granted in knowing what to wear and how to wear it. We change our wearing apparel according to the calendar or our whims and feelings. And the results are a disturbance of body metabolism and some lung and bronchial trouble, or the aggravation of some trouble already existing.

The average man, according to Rubner, is too warmly clothed in summer, with ill ventilated clothing confining the perspiration and its excretion, we have a condition that interprets itself.

The necessary removal of all the clothing once a day relieves matters somewhat, but the betterment is only in degree not in kind and is at best only temporarily, if the same

garments are resumed the following day.

The waste particles adhering to woolen are no doubt lessened by oxidation and ventilation. The best we can do is to minimize it, by reducing its evils as much as possible, not to abolish them as our circumstances and custom of life prevent us. The question of winter clothing is more simple. The chief demand is for sufficient warmth. The skin is not so active and the difference of temperature external to that of body temperature is sufficient aid in such ventilation as is required. In the northern states the hygiene of clothing needs most particular attention especially in changeable weather of the transitions between summer and winter and winter and summer. In the tropics one learns how to adapt himself to surroundings and as a rule the white race do not attempt occupations that are unsuited to his conventional customs. In the Arctic region clothing is rapidly adapted to the climate and the freedom of colds and lung diseases experienced there is not altogether due to the absence of germs. It is in the middle latitudes, in temperate regions, with their various range of temperatures and changeable seasons, that the choice of clothing becomes so serious a problem too often neglected.

A little while ago we were not in the world—a little while hence we shall be here no longer. This is arithmetic. This is the clock. Demosthenes used to say that every speech should begin with an incontrovertible proposition. Now, it is scientifically introvertible that a little while ago we were not here and a little while hence we shall be here no more.

How distinctly we remember longing for the time when we should be eighteen or twenty years old; how long the time seemed then; how short as we look back upon it. Ask any aged person how long since he or she was a child, and the answer will be, "it seems but yesterday."

"So live, that when thy summons comes to join the innumerable caravan, which moves to that mysterious realm where each shall take his chamber in the silent halls of death,

thou go, not like the quarry-slave at night scourged to his dungeon; but sustained and soothed by an unfaltering trust, approach thy grave like one who wraps the drapery of his couch about him and lies down to pleasant dreams."

Thrice happy he whose path is that of perfect health, which, beaming brighter day by day, is lost at length in the noontide splendors of the heavenly glory!

THE DOCTOR'S BEST FRIEND.

There is a power that slayeth men
As men their harvests reap;
It victims takes from hill and plain
And from the mighty deep.

It smiteth all, the good, the great,
The rich, poor, high and low;
All creeds and classes quickly fall
Before a common foe.

It sets the clergy all askew,
And grapples with their sins;
It takes the lawyer from his brief,
And sweeps him off his pins.

The man of commerce, man of books,
The fop, the tramp, the fool—
None are exempt. And all mankind
Bows to its iron rule.

Stay! Said I all? Nay! One there is
To whom it love doth lend:
It obducks the Doctor 'neath the chin
And calls him "dearest friend."

Sad reader, do you dare to ask
Its name, with trembling lip?
Hear, then, it is the Doctor's friend,
Known to the world as *Grip*.
—William Hale.

:O:

A HOUSE EPIDEMIC OF SYPHILIS.—Thanks to a better knowledge of the dangers and modes of transmission of syphilis, and to superior habits of cleanliness, epidemics of the disease are rare in America; yet they occur among the lower classes of our population with greater frequency than is generally supposed. In the *New York Medical Journal* of March 26th., the writer records one in which the disease was introduced into the family, according to the history, by vaccination, and in which every member of the family of eight was ultimately infected. The first case was a child of two years; then the mother, aged 34; then two girls, aged 9 and 14 respectively; then a boy of four; then a girl of seven; and then a nursing, aged six months. The father escaped until the last; but late in the spring he came to the clinic with a characteristic eruption, alopecia, etc. The cases were all severe; there were

several irites; all had obstinate and some very extensive mucous patches; and the two year old child had a syphilitic pneumonia. The site of inoculation was discoverable in two cases only, probably on account of the lateness and irregularity with which the patients were brought to the clinic. In the mother it was upon the center of the cheek, and in one girl it was upon the eyelid. The family was very poor, living in one room, and their habits were very uncleanly.—By William S. Gottheil, M. D.

The instruments which The Dow Portable Electric Assistant Company are putting upon the market this year are far in advance of anything that this Company, or any other making similar goods, have ever produced.

The life of the batteries has been increased over 250 per cent. with no additional cost to the purchaser. The lamp is now operated with a press button, which saves the batteries and lamp, as the light is only used when required, and this method of shutting the current off makes it very convenient for the operator.

The reflectors, tongue depressor, etc., are now attached to the lamp-holder over the lamp, without removing it from the socket. This saves time and improves the handling of the instrument. Several new and valuable attachments have been added, which have proved very useful. The whole instrument is now in such complete condition that we do not see how any physician, who has his own interests and the comfort of his patients at heart, can afford to be without it.

The Company has a new catalogue, explaining everything in connection with the Assistant, also directions for the use of the different instruments in a variety of diseases.

TUBERCULOSIS.—Until we have more light to guide us, until we are more fully convinced of the utility of the serum treatment of tuberculosis, we should continue to take advantage of climatic treatment, which has been fully tried and seldom found wanting.—*Washam, Med. Rec.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

NERVE SUPPLY OF CEREBRAL BLOOD VESSELS.

IF THE discovery of Dr. Huber of the University of Michigan, proves to be authentic, a decided advance in cerebral physiology may be expected.

As is well-known, the authorities have hitherto denied the existence of any nerves which supply the blood vessels of the brain or regulate their calibre and hence the treatment of cerebral disorders has been of a more or less empirical character.

Should, however, the presence of such nerves be demonstrated, the therapeutics of such disorders will assume a more scientific aspect and the benefits to both patient and physician will be greatly enhanced.

THE BOSTON MEDICAL LI- BRARY.

THE announcement that this library is soon to be removed to more suitable and commodious quarters will be received with great satisfaction by the medical profession of New England.

This library, which was founded about twenty-five years ago, has ever since been receiving valuable donations, until now it numbers about 30,000 volumes, to say nothing of most complete files of foreign and American medical periodicals, and collections of portraits and other treasures pertaining to medicine.

Anyone, however, who visits the present building will be struck with

the meagre accommodations and poor facilities which there prevail, and will wonder how a collection which in size is exceeded by only three others in this country, can be compressed into quarters so contracted. A collection like this is of inestimable value to the profession, not only of Boston but of a large territory surrounding it, and it seems strange that an institution so much in need of money should not ere this have received substantial donations. We believe, however, that when its urgent needs are more widely known the proper encouragement and token of appreciation will be at once forthcoming.

THE PHILADELPHIA EPI- DEMIC.

WHEN last discussed, it seemed probable that the question of pure water supply for that city would soon be solved, but at the present writing the end seems a long distance away. Late reports indicate that recently seventy-five new cases of typhoid were reported in a single day, and that there have been within the past two months over 3,000 cases and more than 400 deaths! This disgraceful state of affairs is due directly and almost solely to the sewage laden water which is daily served up to the long suffering inhabitants.

Dr. Leffman, than whom there is no better authority, states that fully 90 per cent. of these typhoid cases are due to this polluted water supply. As is well known the daily consumption of water in Philadelphia has increased to three times what it was fifteen years ago, whereas the facilities for supplying the same are no better, but rather worse than ever before.

Added to this is the fact that the polluted water is pumped into the reservoirs and distributed without any filtration whatever, or without even being allowed to settle.

The repeated refusals of the city councils to legislate should have long ago provoked a popular demonstration, against which the capitalist and the politician would struggle in vain. For some unaccountable reason the people of that city are strangely apathetic and blindly indifferent to the greater day of reckoning which will soon dawn upon them, provided sanitary regulations are not promptly enforced.

After Office Hours.

V

THE MOMENT I entered the Doctor's office I knew it must be Sunday, for he had exchanged the daily shooting jacket for a black frock coat. This coat, which had long since attained its majority, was very glossy in the seams and somewhat lacking in buttons, but for all that, it had a sort of ministerial cut which accorded well with the patriarchal appearance of its owner. Just why he assumed this garb of a Sunday and at no other time no one seemed to know, but as he observed the day in no other particular, it was supposed to be out of deference to his religious *clientile* which was large, but which would have been scandalized had it known their advisor's convictions and his predilection for Darwin, Haeckel and Schopenhauer.

Budweiser was a bitter hater of shams and hypocrisy, but believed that intellectuality covered a multitude of sins. He belonged to the newer German school of agnosticism, or rather, Monism, which boldly but reverently faces the unknown, and appreciating the limitations of the human mind, humbly acknowledges its mental impotency when it comes to the fundamental questions of existence. Hence, he looked with pitying contempt upon those who claimed to know even a little and who presumed to dictate to others any conduct of life or species of doc-

trine; hence, the various outbreaks of the egotists and the irrepressible were promptly greeted with caustic criticism and a withering sarcasm.

"Did you ever stop to think," asked the doctor, breaking up a card of matches and lighting his pipe with the last one, "of the sins of omission, which science has got to answer for? Just notice the progress of medicine during the past century, or the past ten years for that matter, and mark what a puny, irresponsible baby this science is. We poor doctors must fight disease with the weapons which she puts into our hands, but why are they so imperfect and why were they not supplied earlier in the battle? Here is a case of appendicitis which a few years ago was unrecognized and often ended in death, but which now can be managed in a rational way. How many hundreds of lives have been lost for the lack of a remedy which came a little too late!

As I sit here I recall more than one instance where a community has been plunged into mourning and homes laid desolate simply because I did not have just at that time the required knowledge or the proper remedial agent, and I feel almost a criminal myself as I recall the deaths of some of my little patients and think that had I possessed, for example, the improved antitoxin of to-day they would not have died.

Yet the car of Juggernaut moves on, crushing beneath its wheels those whom fate has placed in the van of the procession.

Yes, I know it is customary to fill the college commencement exercises with tributes to science, but there is a sombre side which only those who in times of need have listened in vain for her coming footsteps, can properly appreciate. It is true she has brought blessings in her train, but let me tell you her pathway is strewn with the corpses of innocent children and the bleaching bones of saints and sinners. Small comfort is it, as we

stand impotent before an impending catastrophe, to know that perhaps next year we shall possess the power to avert it. Indeed, it is rather the refinement of cruelty to be ever tormented with a sense of our deficiencies which rise before us in quiet hours, and, like the ghost of Banquo, will not down!— Whats that?" asked the doctor.

And the small boy who had crept in through the door proceeded to explain that his mother was suffering from "cramps in the stummick" and inasmuch as it was Sunday he was unable to purchase the required pint of gin at the drug store without a prescription. "And did your good mother give you any money for the doctor?" inquired the latter, suddenly returning to a commercial basis and gazing in a most benevolent way upon the little urchin.

"No sir, but she said as how I was to pay for the gin!" he replied. "Ach, so!" returned the doctor; and taking the dollar; bill he wrote for two ounces of the desired remedy for maternal spasms and gave Johnny twenty cents to buy it with.

"For this reason," continued the speaker, "I never could understand how the medical dude ever got into our profession, for the calling is a particularly serious one and to be made a success demands careful, untiring work. I should think that here the wearers of short pants and gorgeous raiment would feel wholly out of place and alone.

Bulwer, in one of his novels, speaks truly when he says:

"To the true physician there is an inexpressible sanctity in the sick chamber. At its threshold the more human passions quit their hold on his heart. Love there would be profanation. Even the grief permitted to others he must put aside. He is disabled for his mission if he suffer ought to obscure the keen, quiet glance of his science. Age or youth, beauty or deformity, innocence or

guilt, merge their distinctions in one common attribute—human suffering appealing to human skill."

Admitting then the seriousness and responsibility of our calling it is queer, isn't it, that we should have much in common with the society pets or tailor's models?"

"But it won't do to say too much about these people," I replied, "for, unfortunately, we have fads and failings ourselves."

"Yes, that is true, and sometimes the impairment amounts almost to a monomania. But the profession didn't create these people—they were born queer and distorted, and they have continued ever since to grow sidewise. We see them everywhere and the professions they happen to choose simply develop phases of the original perversity. You know Holmes said that the mind of a bigot is like the pupil of the eye—the more light you let into it, the more it contracts; which is the same as saying that these cases are hopeless from the start and no amount of fatherly advice or post-graduate instruction can modify in the least their mental condition. Yes, I suppose these failings are about as well marked in the profession as elsewhere. Now, there's the fellow afflicted with the form known as *cacæthes scribendi*. He imagines that he has heard a voice saying: 'Write!' and the result is that the journals are filled with painfully scientific articles which no one understands but himself. They are not even coherent or truthful, but they go just the same, and by and by people come to believe that the author has had the success and the experience which he claims, and then the next thing you hear is that he holds a professorship and is doctoring in the ultra-fashionable circles. This is where the meek become exalted and where the irony of Fate is shown to great advantage.

Then there is another form known as the *furor secandi*, in which the

poor wretch fondly imagines that he has a divine right to investigate people's interiors. He holds that while there may be other surgeons, he is the surgeon *par excellence* and created for this particular purpose. He wants to operate on everything he sees from measles to myoma, and his nightly dreams are lighted with visions of impossible surgical situations in which he himself forms the center of attraction. This, however, is one of the later forms of *manie de grandeur* and the subject doesn't usually last long after these symptoms become pronounced.

Of course, you have seen the men who are a little cracked on the subject of medication. They believe, you know, that every disease has about ten specific remedies and that there are a good many others which ought to be given in the intervals. They confine themselves mostly to the new drugs and the last one which appears is about the best thing going. These men are worth lots of money to the drug houses and the latter 'have them on the list.' "

"Are there such things as religious doctors?" I innocently inquired, knowing that my friend had recently suffered in consultation with one of that ilk.

"Well, I should say so! Didn't you ever meet any? Well, I hope you never will, for they are the devil's own children! They are always doing something mean and things that are *almost*, but not quite unprofessional. But they have you at an advantage for you can't swear at them for fear of wounding what they call their finer sensibilities," and Budweiser expectorated in the coal hod, and, under forced draught, the huge pipe poured forth volumes of smoke. "They are the cussedest lot of fellows you ever saw in your life! They are so critical and opinionated, and the number of unkind and unholy things they can do to you in a polite and legitimate way, are more in num-

ber than the sands of the sea. No, give me rather for an associate the true and large-hearted sinner, who numbers not cant and hypocrisy among his many failings, but who has some appreciation of the rights and feelings of his fellowmen.

But speaking of fads, most every day I run across a man who is full of notions—so full that he is practically worthless as a scientific physician. One day he believes that the dosometric system is going to supercede every other and his patients, thereupon buy an alarm-clock and take minute granules at unearthly hours of the day and night. The next time I see him, he has gotten over the fence into high potencies or has become enamoured of some fancy method for overcoming some incurable disease. For awhile everything is due to a torpid liver and his patients have got to take chologogues or he'll know the reason why. Then he will suddenly turn over a new leaf and assert that people eat too much and thereupon his poor patients who have done the best they could to keep up with him are forced to go on a diet of fish balls and cold water, no matter whether they are suffering from Bright's disease or sore throat. Well! I suppose the enthusiast has his uses and that in the lexicon of youth there still will be no such word as 'fail.'

Year after year we parallel our well travelled road with a new one of tentative and experimental therapeutics. I hope our unsuspecting patients are not suffering thereby—yet I have sometimes thought they did," and the doctor made a mental survey of a long row of "year-books," which contained a tabulated report of so many, many things which had been weighed in the balance and found wanting.

"But we are forced to read them," he continued, "for nowadays it is important that we should have a complete knowledge of 'the things that aint so'—otherwise some young-

man will get up in our medical society and dazzle us with assertions which we are unable to refute.

One learns after awhile to accept the *ipse dixit* of no one even though he can prove it and even though he may sit in the seats of the mighty. He must investigate things himself and hold fast to what he has proven. The career of the physician is a history of questioning effort, experimental labor and meagre reward so far as the battle against disease is concerned. If, perchance, we attain something, it often comes too late and we are just ready to enjoy the fruits of conquest when the pruning-knife of Time cuts us down. I wonder whether within the walls of the Cloudless City the days bring"—

"Der sausage vas hot alrretty," announced Mathilde.

—:o:—

Correspondence.

AN EXPECTORANT MIXTURE.

Editor New England Medical Monthly:

I would like to have you publish the enclosed prescription in the prescription department of your journal.

It is the best expectorant mixture I have ever used and after a large experience with it in acute and chronic bronchitis, I would like to have my confreres try it.

R Ammon. mur., viij.

Tinct. aconit. rad., ij.

Syr. tolutan, xxx.

Syr. pruni vir., q. s. ad 120.

M. Sig. A teaspoonful every three hours.

Fraternally,

Jos. A. Silverman, Ph. G., M. D.

—:o:—

PLASTER FOR LUPUS OF THE VULVA.
The *Riforma medica* gives this formula:

R Olive ol.,

Rosin,

Yellow wax, aa parts viij.

Gum ammoniac,

Venice turpentine, aa part j.

Pyrogallic acid, parts iv.

M.—*N. Y. Med. Jour.*

Abstracts.

ON THE ARTIFICIAL FEEDING OF INFANTS.—No one will challenge the statement that the matter of the artificial feeding of infants is second to none in importance. The stationary population of France has been attributed to the defective feeding of French babies by artificial foods. When a mother will not or cannot nurse her own child it is not only a question of life and death for her offspring depending upon how it is fed, but it is also a graver question, for to the community in which the child is to grow up it is better that a child should die than that it should grow up a charge or a danger to that community. The proper feeding of infants means, therefore, also the moral and intellectual development of a new being, and as it is made to incline by either good or bad feeding in infancy so is it apt to incline in later years.

A food that will do for a child at one age is not always suitable at another. The mere lessening of the amount of water used with a given quantity only serves to strengthen it, but it does not alter the proportions, and this is the important point. It is necessary to have foods so varied in composition as to be suitable to the different stages of development of the child's digestive organs. It will, I trust, be of interest to other practitioners to learn that such a series of foods can be had, and that they may be readily prepared. These foods have been very successful in my hands. I will relate a few cases that speak for themselves, after which I shall draw several conclusions.

Case I.—Male, four weeks of age, refused to nurse at the breast, was peevish and crying most of the time, and his bowels were constipated. I gave him the No. 1 Allen and Hanbury's prepared mothers milk, and in a few days saw a favorable change in him. He appeared to be satisfied with each feeding, his bowels became regular, he slept well, did not cry upon awaking as usual, and he gained in weight and color.

Case II.—Female, 9 months of age (premature birth at eighth month), a weak, puny child; could not sit up in

a high chair; took no notice of her surroundings; was never known to laugh; did not weigh more than 12 pounds, and at this time, did not play with anything given to her. She never appeared to be hungry, but took her food mechanically. She had been using condensed milk since birth. In fact, she was in such a condition that her mother says, she was not expected to live. I put her upon Allen and Hanbury's No. 3 (malted) infant food. I saw her ten days afterwards, and was very much pleased with the change. At the present time, one month after beginning the food, she has four teeth, is much brighter, laughs and plays with her sister, cries when hungry, sleeps well, her bowels are regular and, the mother tells me, she has gained considerably in weight.

Case III.—Male, 12 weeks of age, born at term, and had been on a well-known proprietary food, but without thriving as he should have done. He had considerable colic during the night, would awaken with a crying spell every two or three hours through the night, would pass large lumps with each movement of the bowels, and was rather constipated. After feeding, he would vomit, and the food did not satisfy him, for he would cry again as soon as the bottle was emptied. After having had the other successes with the Allen and Hanbury's Nos. 1 and 3, I concluded to put him upon the No. 2, and it agreed with him. His bowels became regular and softer, he slept between five and six hours during the night (a great item to the parents), the attacks of colic were fewer and milder, and he gained two pounds in three weeks.

Another case that I get from a professional friend is that of a child one year of age, and weighing only 12 pounds. During the last six months of its short life it had struggled through attacks of summer diarrhea, cholera infantum, bronchitis, tonsillitis, diphtheria, and capillary bronchitis, with the last of which it was wrestling when put upon the Allen and Hanbury's food as a mere experiment because the other foods, without exception, did not do the required good. At this time the child was merely skin and bones and as pallid as if it were dead and as languid and listless almost as a person in articulo mortis after a lingering and exhaustive illness. Improvement followed at once upon the use of the food without there being any other assignable cause for the change. It gained steadily at the rate of half a pound a week up to the present time,

when its weight is 15½ pounds and its face is full, its color is returning, its spirits are revived, and it bids fair to make a triumphant recovery.

The same physician had also had three other cases almost the counterpart of my own that it is useless to report, for they would only encumber this article without bringing out any new facts.

My experience has satisfied me that the Allen and Hanbury's food has three advantages not found together in any other food. They are:

First.—It is graded in series, which makes it superior to all other foods.

Second.—It is readily prepared, which is an advantage to the busy mother, and requires the addition of nothing but water for the first and second grades.

Third.—It does not constipate, and the tendency to have colic is lessened, and, in my experience, the infants did not vomit after taking it.

By Joseph I. Smith, M. D.,
1648 North Eighth St.,
Philadelphia, Pa.

Instructor of Clinical Medicine in the Philadelphia Polyclinic; Assistant in the Nose, Throat and Ear Clinic in the Howard Hospital; Director of Physical Education in the Catholic Central High School.

To The Medical Council.

TUBERCULAR TONSILS AND ADENOIDS AS THE ETIOLOGY OF ENLARGED CERVICAL LYMPH GLANDS.—One of the most interesting and difficult problems for specialists in children's diseases, (and as some one has well said this is the specialty of the general practitioner), has been the etiology of enlarged cervical glands, of cervical lymphadenitis as our ultra-scientific friends like to call it. The tonsils have long been suspected as one of the points of entrance for the infection. The review of the recent literature of the subject in "Progressive Medicine," the new quarterly digest of progress in medicine, edited by Professor Hare,* shows that not only has the roll of the tonsils in this matter been made clear, but that it now seems certain from the investigation by a number of observers, that the adenoid and faucial tonsillar tissues at the upper part of the pharynx are quite often the seat of chronic tuberculous processes.

Professor Dieulafoy, the distinguished French clinician of the Hotel Dieu, Paris, could demonstrate the presence of tuberculous tissue histologically in excised adenoids in only about six per cent. of the cases, but the much more delicate biological

*Progressive Medicine, a Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M. D. Vol. I, March 1899. Lea Brothers & Co., Philadelphia.

test of injecting portions of the excised tissues into guinea pigs gave positive results by the death of the animals from tuberculosis in 20% of the cases. These biological results, Dieulafoy considers as suggesting the true conclusions to be drawn. A number of other observers confirm these results, and it adds to the weight of the confirmation to know that there have been no national lines in the matter. Investigators in England, in various parts of Germany, in Russia, and in Austria, have come to practically the same conclusions as to the frequency of tubercle in these tissues.

How important these observations are for prophylaxis is evident at once. We have long known that when these tonsillar adenoid tissues were enlarged they should not, for certain physical and mechanical obstructive reasons, be allowed to remain, but there is now added the realization of the danger that tissues of such low vital resistance to the invasion of bacteria may frequently, owing to the presence of an abundant pathogenic flora in the mouth, become the ports of entrance for serious disease.

These considerations will better enable us to convince parents, too, of the necessity for the removal of these enlargements before they have become infected, or at least before they have passed the infection on along the lymph paths. The whole of this subject is in the line of the best advances in present-day medicine, and is especially important because of its intimate connection with prophylaxis in early years, of tubercular processes, against which, until now, our hands have been practically tied.

MEDICAL PROGRESS.—ADVANCES IN OUR KNOWLEDGE OF TYPHOID FEVER. Since the sad experience of our troops at home and abroad last year with typhoid fever, medical interest in the disease has been, if possible, even more keen with regard to everything pertaining to it than before. The springtime nearly always witnesses a recrudescence of the disease in various parts of the country, owing to the fact that the melting snows and the spring freshets carry down with them into the water supplies of towns a certain amount of infective typhoid material that has been accumulating during the winter months. Typhoid is one of those diseases of which the practitioner is apt to think that "there is nothing new under the sun," at least, nothing new that has a practical application, or is of value in the prophylaxis or

treatment of the disease. A glance, we think, at Dr. Taylor's article on "Typhoid Fever" in *Progressive Medicine*, the new quarterly review of medical progress, edited by Professor Hare,* is apt to disabuse one of any such unprogressive notion.

With regard to prophylaxis of others during the treatment of a case of typhoid, these noteworthy recommendations from a French source are given: (1) Isolate patients suffering from typhoid fever, or at least do not permit them to be treated in a room or ward containing young people who have not previously had typhoid. The warning contains some wholesome advice too often neglected, and sometimes with sad results, because we are persuaded that typhoid is not an air-borne disease, and forget that contiguity favors infection because precautions will inevitably sometimes be neglected. (2) Nurses for typhoid cases should, if possible, be only such as have had typhoid themselves. In a family the young people should be removed. (3) The floor of the sick room should be oiled, so as to be impermeable. Carpets and rugs should be removed, and the raising of dust should be avoided by the frequent use of a cloth dampened with antiseptic solution. (4) The nurses should wear linen clothes, which they should remove when they leave the sick room, and in general they should be warned to be circumspect in their relations with others, and especially careful of the utmost details of antiseptic in the matter of the preparation of food and drink for themselves and others.

The review of the question of typhoid infection from oysters is full and conclusive. The possibility of typhoid infection through salads is made clearly apparent, manure being used in bleaching the plants and gardeners being careless in handling it and washing the plants in any sort of water, or sprinkling them with infected cistern water.

The strikingly practical features of this excellent review of the recent literature of typhoid, are the discussion of the question of typhoid without intestinal lesions, and of its corollary that intestinal lesions, even when existent, often play a very minor rôle in the disease. How important these questions are for the matter of treatment is clear at once. All the so-called abortive methods of treatment, all the much-lauded sys-

* *Progressive Medicine*, a Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M. D. No. 1, March, 1899. Lea Bros. & Co., Philadelphia.

tems for securing intestinal antiseptics, all the many drug formulæ and combinations that have been enthusiastically recommended for the treatment of typhoid, assume that the essence of the disease is the intestinal lesions. This is a notion that must disappear before scientific advance of our knowledge of the true nature of the disease.

CREDÉ'S SILVER OINTMENT.—At the meeting of the New York Academy of Medicine, Section on Obstetrics and Gynecology, January 26, 1899, Dr. S. Seabury Jones read a paper on "The Use of Credé's Silver Ointment in Puerperal Sepsis" (*Medical Record*, February 11, 1899). The author said that Dr. Tracy, registrar of the New York City Board of Health, had kindly furnished him with the statistics as to the number of deaths from puerperal septicæmia, grouped in periods of five years, from 1866 to the present time. These figures, together with the fact that last year, in the boroughs of Manhattan and the Bronx, there were three hundred and seventy-six deaths from all puerperal diseases, indicated that there was much yet to be done in the line of making childbearing more physiological and less pathological. These statistics, of course, left entirely out of consideration the large number of cases of puerperal sepsis in which life was not sacrificed, though much damage might have been done.

In spite of the brilliant results claimed to have been secured in Credé's clinic by the use of the new silver salts, the literature of the subject in this country was still very meager. The reader of the paper then proceeded to review the literature, calling special attention to the researches, in this country, of Carey Lea on allotropic silver. What he described as "gold-colored allotropic silver" appears most nearly to correspond with Credé's soluble silver. Lea says that it was soluble in water, and that when heated on platinum it was converted into ordinary silver. It occurred in small, hard pieces having a greenish metallic luster, but when subjected to trituration it became pasty and assumed a yellow tint. Credé used a fifteen per cent. ointment containing soluble uncombined metallic silver. He estimated that of the 3 grams which he recommended for the initial inunction, about $4\frac{1}{2}$ grains of pure silver were absorbed into the system. This investigator used the ointment only in well-observed cases in which the diagnosis of severe septic infection

was clear. In local processes the inunctions were made as far from the seat of disease as possible. He found that in acute and recent cases one inunction was usually sufficient to effect disinfection of the system in from twenty-four to thirty-six hours. Improvement was usually observed in from three to ten hours—indeed, it was so sudden as to astonish both patient and physician.

Author's Remarkable Case.—Dr. Jones said that he had used the ointment in only one case, but in that one the result had been thoroughly conclusive and exceedingly gratifying, and seemed worthy of presentation to his fellow-practitioners. The patient, a primipara, twenty-one years of age, was delivered by him with the aid of forceps, on December 24, 1898, after a tedious labor. The placenta was detached with difficulty from the bottom of a pocket. There were only a very small lesion of the vaginal mucosa and an insignificant laceration of the cervix. The usual antiseptic precautions were observed during the labor, and a postpartum douche of lysol was given. On the third and fourth days the temperature varied from 103° to 104° F., and there were slight rigors and perspirations. In spite of intra-uterine douches of formalin and the internal use of quinine in full doses there was no improvement. The patient was anesthetized on the evening of the sixth day, and the site of the placental attachment was scraped with the finger. Some shreds were removed, and the débris was foulsmelling. The curette was not used because the placenta had been detached from the bottom of a pocket, leaving the uterine wall very thin. The uterus had been exceedingly tender for several days, and the picture was that of septic metritis, but not of general sepsis. The patient passed a bad night, and the temperature remained high during the next three days. On the ninth day there was a severe rigor, and fifteen hours later there was another rigor, with a pulse of 130 and a temperature of 105° F. General infection then seemed to have been effectually established as was shown by the cessation of tenderness and the occurrence of diarrhoea. On the eleventh day the pulse became very rapid and thready and her condition seemed very desperate. That evening between 1 and 2 drachms of the Credé ointment was rubbed into the skin on the inner surface of the thighs. The temperature was at that time 104° F., the pulse 120, and the patient was bathed in profuse

perspiration. The subsequent history was like that of a bad case of diphtheria treated by antitoxin. At 1 A. M. the pulse was 110 and the temperature was 102° F. At 8 A. M. the temperature fell to normal and the pulse to 90, and the patient expressed herself as feeling quite well except for the perspiration. The inunction was repeated in the morning. The diarrhoea ceased after the first inunction. The local process was not at once checked, but it rapidly improved after the third inunction. After this no more inunctions were given for four days. The pulse and temperature remained normal for five days, during which time she had a good appetite and felt nearly well. Four days after the last inunction she was suddenly seized during the night with abdominal pain, and the temperature rose to 102° F., and by 7 A. M. had reached 104° F., with a pulse of 130. The inunction was again given, and within twenty-four hours the temperature and pulse reached the normal. The inunctions were then given in smaller quantities for four days, and then in still smaller quantities for a short time longer. From the time of the first inunction all internal douches and local applications were discontinued. Daily examination of the urine failed to show any albumen, and there was no evidence of poisoning from silver. On the twenty-seventh day the patient was completely well and was allowed to get up.

The speaker said that, of course, one case alone did not amount to much; but the close correspondence of the phenomena observed in this case with those reported by Credé was instructive and constituted his reason for placing this single case on record. Altogether about 1¼ ounces of the ointment were used. He thought 1 drachm was not too much for the initial inunction, and he would not hesitate to repeat this in from twelve to twenty-four hours. It was also well not to suspend the use of the ointment too soon. He hoped further experience would establish the Soluble Silver of Credé as a true chemical antitoxin.

Puerperal Sepsis a Surgical Disease.—Dr. H. N. Vineberg said that he had been particularly interested in the figures given in the paper regarding the mortality from puerperal sepsis, as he had intended to make this a special study. There could be no doubt about the frequency of puerperal sepsis in New York City, and the high rate of mortality from it. No matter how limited one's experience, quite a number of such

cases were encountered. Dr. Vineberg said that puerperal sepsis should be looked upon as a surgical disease. There was always a wound somewhere—either in the perineum, vagina, cervix, or uterus. If the infection had spread beyond there, a lesion would usually be found elsewhere. It was quite common for the cellular tissue around the uterus to be involved. The infection might pass through the uterus and give rise to general peritonitis. A case reported recently by Dr. Saunders showed the danger of using a remedy like the Credé ointment. A puerperal woman had been presumably cured of her sepsis, nevertheless she died on the forty-second day, and the autopsy first revealed the cause, *i. e.*, a small puerperal abscess behind the uterus. Had this case been treated on surgical principles, in all probability the patient's life would have been spared. In the cases upon which he had himself operated he was confident that no other treatment could have been successful, except possibly in one of the cases. In one of the four the uterus was studded with small abscesses. It was not probable from our knowledge of medicine that anything which could be introduced by inunction could affect such a condition. He was willing to try the ointment, but he hoped never to forget the principle that puerperal sepsis was a surgical disease and demanded surgical treatment.

The Ointment Useful in Mild Puerperal Sepsis.—Dr. Herman J. Boldt said that he had had some experience with the Credé ointment. It was necessary to differentiate carefully between true, acute puerperal sepsis and the milder forms which are amenable to many methods of treatment. Soon after Credé's publication on the subject of his ointment, the speaker said, he had had occasion to try it on a very severe class of cases of puerperal sepsis, and all of these persons had died very promptly. Since then he had used it in some milder cases, and had been impressed with the fact that in these more chronic forms of puerperal sepsis it exerted a beneficial influence. In these five or six cases the rapid fall of the temperature was quite noticeable.

Objects to Wholesale Hysterectomy.—Dr. Paul F. Mundé said that if we followed Dr. Vineberg's lead we must assume that the majority of cases of puerperal sepsis required surgical treatment, even the removal of the puerperal uterus in the severer forms. He was afraid that this

would lead to the hap-hazard extirpation of uteri simply because no definite cause for the sepsis could be discovered. He agreed substantially with Dr. Vineberg in his contention, but his statement was so sweeping that one was inclined to believe that he would have all uteri extirpated which were the seat of puerperal sepsis. Multiple abscesses in a puerperal uterus often could not be diagnosticated by any one until the uterus was out of the body and under the knife. Of course, a probable diagnosis might be made in some instances by inference or exclusion. But there was a class of cases in which removal of the uterus did not seem to be indicated—the class referred to by the reader of the paper. All would hail with joy a remedy which would act in these cases like an antitoxin. These were the cases in which no cause for the sepsis could be discovered, and yet the septic process had extended beyond the uterus and the pulse and temperature ranged high. These were the patients who became suspiciously comfortable after a time, and who died happy—the euthanasia in these cases was perfect. If the Credé ointment, or any other remedy, was capable of checking the downward course of these unfortunates, let us welcome it by all means.

The Ointment Worthy of Trial.—Dr. S. Marx said that it seemed to him that the silver treatment was similar to the old mercurial treatment—the introduction into the system of the metal for the purpose of antagonizing the sepsis. Every puerperal patient for whom he had tried the antitoxin had died. For simple cases of puerperal fever neither antitoxin nor Credé's ointment was needed, for such cases yielded to simple and well known measures. He believed that many of the reported successes from antitoxin in puerperal sepsis were dependent, not on the use of the antitoxin, but upon the coincident removal of the source of the sepsis. All remedies hitherto proposed for the desperate cases of puerperal sepsis, in which the cause could not be found, had failed most dismally, but in view of the truly remarkable result in Dr. Jones' case he would be glad to give the ointment a trial at the first opportunity.

Dr. Vineberg explained that he did not recommend removing the uterus of every woman suffering from puerperal sepsis—indeed, the fact that he had seen many cases of puerperal sepsis and had operated in this way in a very small number

was a sufficient refutation of the implied charge in the criticisms of his position.

Dr. Jones closed the discussion. He said that he had been impressed by Dr. Vineberg's statements with the belief that he was prone to operate upon severe cases of puerperal sepsis. As he understood it Dr. Vineberg would have operated upon the case reported in the paper, and yet the result obtained with the Credé ointment was certainly much to be preferred, as the patient was left with her sexual organs intact. Moreover, the fact should not be lost sight of, that the use of this ointment, by reducing the temperature and pulse, put the patient in a far better condition for operation should this be required. He believed, with Credé, that after the use of this ointment in a favorable case the patient soon found herself rested and her appetite returning. This was totally different from the usual experience in septic cases, even when they were improving and were on the road to recovery. He was not a little proud to find that Carey Lea's investigation on allotropic silver was the foundation of this treatment advocated by Credé. Credé, and many others in Germany, had reported recoveries from this treatment, even in apparently desperate cases. It was to be particularly noted that in mixed infections of diphtheria and scarlet fever good results had been observed from the use of the silver ointment. The ointment was made near Dresden under Professor Credé's supervision. The ointment resembled mercurial ointment in appearance, but it was somewhat softer. It caused no irritation, but sometimes produced a peculiar tingling sensation in parts adjacent to the site of the inunction.

THE PRESENCE OF THE BACILLUS TYPHOSUS IN THE URINE IN TYPHOID FEVER.—It has recently been established that the typhoid bacillus may occur in enormous numbers in the urine, in the course of typhoid fever. Richardson¹ of Boston, showed that in 38 cases of typhoid fever, the bacilli were present in the urine of nine, always in large numbers and in practically pure cultures; the bacilli appeared first in the later stages of the disease, and persisted in most of the cases far into convalescence. The bacilli were nearly always associated with albuminuria and casts. Horton Smith² examined the urine in seven typhoid patients, with three positive results; he observed that

¹ Journal of Exp. Med., 1898, vol. iii.

the organisms may be so numerous that the urine becomes distinctly turbid on that account. Petruschky³ examined the urine in 50 cases of typhoid fever, with three positive results. The first case retained the bacilli in the urine for two months after the temperature had become normal; the second showed bacilli present for a month and a half after the subsidence of the fever, while in the third case the organisms had disappeared eight days after the beginning of convalescence. He calculated that in one case a single cubic centimeter of the urine contained 170,000,000 typhoid bacilli.

Richardson⁴ refers to a remarkable case, mentioned by Dr. Cushing of Baltimore, of a man who had an attack of typhoid fever five years before; ever since then there had been trouble with the urine, and investigation showed that there was cystitis present, and the typhoid bacillus was obtained in pure culture from the urine. In connection with this may be mentioned the case recently described by Houston⁵ of cystitis of three years' standing, in which the typhoid bacillus was present in the urine. This case is especially interesting because of the presence of a typhoid infection without the usual symptom of typhoid fever ever having been recognized. From the history it seems very probable that the typhoid bacillus had been present in the urine from the beginning of the cystitis. The patient's blood yielded a well-marked agglutinating reaction. This case seems to show that the bacillus may occur in the urine and possibly also in the tissues, the blood serum giving the characteristic reaction, and yet without any clinically recognized typhoid fever.

Referring again to the presence of the typhoid bacillus in the urine in typhoid fever, it is quite plain, in the light of the evidence cited, that the supervision of typhoid patients has heretofore been very inadequate indeed. The urine as well as the stools of typhoid patients must be disinfected, and, as Richardson emphasizes, the necessity of such disinfection and supervision does not cease with the subsidence of the fever, but must be kept up sometimes, it would seem, for weeks, sometimes for years.

In his second article on this subject Richardson⁶ dwells particularly upon the value of urotropin as a

urinary antiseptic, with especial reference to its use in typhoid fever. Irrigation, with the necessary catheterization, is not a method of treatment that would recommend itself in case internal administration of certain urinary antiseptics should be found to give the desired results. The number of cases of typhoid fever comprised in Richardson's present report is 66, and of these 14 showed the presence of bacilli in the urine. Eleven of these were submitted to treatment, with the following results: Two cases received salol, and in one instance the bacilli disappeared. In one case the salol did not have any effect on the bacilli, and urotropin was then substituted for the salol, followed by the prompt disappearance of the organisms. Nine cases were treated with urotropin, and in every one the bacilli promptly disappeared. This favorable result was accomplished in eight out of nine cases by the use of 60 grains or less of the drug; one case required 200 grains to remove the organisms. A number of the cases (seven) were followed for from seven to 66 days after the administration of the urotropin was stopped, and the bacilli did not reappear; so that it seems fair to assume that the removal of the typhoid organisms was permanent.

Freshly passed turbid urine, if acid in reaction, should always be regarded with suspicion when it concerns typhoid patients or convalescents. When such urine, on microscopic examination, shows the presence of bacilli it is quite probable they are the typhoid bacilli, and the results of the cultures can thus be foretold.

Urotropin, introduced by Nicolaier in 1894, is formed by the action of ammonia on formaldehyde. It appears in the urine as early as fifteen minutes after administration, and may be demonstrated for twelve hours or longer after a single dose of 7.5 grains. Elliot, who praises this drug highly as efficient in cystitis, observed no ill effects from its use. In Richardson's cases urotropin did not seem to cause any special changes in the urine.

From the foregoing considerations it may be concluded that, inasmuch as the urine of typhoid fever patients may contain typhoid bacilli in enormous numbers for weeks, months, and even years, and thus constitute a grave danger not only to the patients but also to the public health, the necessity for rigid disinfection and supervision of their urine is at once apparent. It would, therefore, seem advisable that, as it is impossi-

³ Trans. Med. and Surgical Society of London, 1897.
⁴ Centralbl. f. Bakt. xxiii, 1898.

⁵ Journal of Exp. Med. 1899, vol. iv.

⁶ British Medical Journal, Jan. 14, 1899.

⁷ Journal of Exp. Med., 1899, vol. iv.

ble without bacteriologic examination to determine whether or not typhoid bacilli are present in a given urine, all typhoid patients should receive urotropin (30 grains daily for ten days) beginning as convalescence is approached. In the struggle in which the profession of the United States is engaged against typhoid fever, such observations as are here referred to as certainly of the greatest importance. They point the way along which the practicing physician may do his full duty in his attempts to arrest the spread of the disease when once established.—*Journal of the American Medical Association.*

REPORT OF 78 CASES OF PULMONARY TUBERCULOSIS TREATED WITH WATERY EXTRACT OF TUBERCLE BACILLI.—A report of 78 cases of pulmonary tuberculosis, treated at The Winyah Sanitarium, at Asheville, N. C., in 1898, with watery extract of tubercle bacilli, by Dr. Karl von Ruck, appears in the February number of the *Therapeutic Gazette*.

The author giving due credit to the advantages of the favorable climate of the Asheville plateau as well as to the systematic employment of hygienic and dietetic methods, in a special institution, shows nevertheless by his results the unmistakable favorable influence of this preparation, which he perfected in his laboratory in February, 1896.

He with many others, notably Professor Koch, have long realized that the bodies of tubercle bacilli contain a soluble substance, a proteid upon which the curative action of all tuberculin preparations and modifications must depend, small and variable quantities of which were thought to enter into the culture fluid from which the tuberculin preparations are made.

Experiments upon animals have shown that the injection of dead tubercle bacilli produce both curative and immunizing effects, but they have always produced abscesses at the point where they were injected and often spurious tubercle in the animals experimented upon, conditions which seemed to preclude their use in the treatment of human tuberculosis.

A solution of the tubercle bacilli, without injury to the curative proteids was therefore naturally sought for, and in April, 1897, Professor Koch announced that he had accomplished this in the production of tuberculin R., which was then given to the profession.

Several weeks later Dr. von Ruck announced his success in also mak-

ing the desired solution and communicated his experiments and methods in a paper read before the American Climatological Association and published in its transactions for 1897, and also in the *Therapeutic Gazette* for June 1897. His method of preparation differs from that published by Professor Koch and is briefly as follows:

The tubercle bacilli are filtered out of the rapidly growing and highly virulent culture. After washing with distilled water for the removal of the remains of the culture fluid, they are dried in a vacuum dessicator. Next they are powdered in an agate mortar and then extracted with sulphuric ether. This extraction removes the fats. They are again dried and powdered as before and their further extraction takes place in sterilized distilled water over a water bath with a temperature of 120° F. The proteids becoming dissolved in the distilled water, the fluid is then decanted and filtered through porcelain, when finally the amount of proteids is determined and the preparation standardized to a certain per cent.

Prof Koch simply triturated his tubercle bacilli and then put them into distilled water and separated the undissolved germs with a centrifugal machine. His preparation did, however, not pass through a porcelain filter and it was subsequently shown that when an attempt of filtering through porcelain was made, a residue collected in the filter consisting of tubercle bacilli.

Virulent infection followed the injection of this residue in animals and for this reason Prof. Koch was obliged to withdraw his tuberculin R., it being an emulsion of tubercle bacilli and fragments of such, rather than a true solution.

Koch's claim that in a true solution of the tubercle bacilli the final perfection of a specific remedy was attained, would appear to be verified by the results which Dr. von Ruck reports.

He treated with his watery extract 20 cases in the early stages, all of which recovered, with an average gain of 11 pounds in weight, and subsidence of all symptoms.

Of 37 cases in a more advanced stage 27 recovered, seven were greatly improved three improved, and none grew worse, gaining on an average nearly 13 pounds each.

Twenty-one cases in a seriously advanced stage were also treated, of which three recovered, nine were greatly improved, seven were improved, only two grew worse or died,

there being an average gain in weight of $10\frac{1}{2}$ pounds each.

The remedy was also given for trial to Dr. Denison of Denver, Dr. Taylor of St. Paul and Dr. Williams of Asheville, all of which obtained good results. Dr. Williams supplying the date of 12 cases treated by him with von Ruck's extract, shows seven early stage cases, all of which recovered; of three cases in the second stage, one recovered, and two were greatly improved, and of two far advanced cases, one recovered and one grew worse.

Comparing his previous results with those obtained with the watery extract in von Ruck's institution he shows the results as follows:

	Cases.	Recoo- per ed.	Im- proved.
		per ct.	per ct.
Treated without specific remedies,	816	12.1	31.0
Treated with Koch's original tuberculin,.....	379	35.5	37.5
Treated with antiphrasin and tuberculoidin,.....	182	32.5	46.8
Treated with tuberculinum pur- ificatum (von Ruck),.....	166	43.4	59.2
Treated with watery extract of tubercle bacilli (von Ruck),...	78	64.1	83.8

Among other matters of interest, the report also contains mention of Dr. von Ruck's efforts to produce a serum, as suggested by Professor Koch in his paper by using tuberculin R. and his watery extract for immunization. Dr. von Ruck used goats for this purpose and injected them in increasing doses reaching 70 c. c. per single dose in the course of six months.

Serum taken from these animals failed to protect or cure guinea pigs, and finding his results entirely at variance with the claims Dr. Fisch, he purchased serum from Dr. Fisch's laboratory and treated a number of guinea pigs, all with negative results.

These experiments are given in detail and it does not appear that the degree of tuberculosis or its course was in any way modified by the injection of this serum; the control animals showing no greater progress in the disease than did those which were treated.

Full directions are given for the use of the Watery Extract, the beginning dose being 1-1000 of a milligram, and this is gradually increased to 5 milligrams. There are three solutions, No. 1 containing 1-100 of one per cent. No. 2 1-10 of one per cent. and No. 100 containing 1 per cent. of the anhydrous extracts.

The Honorable Timothy L. Woodruff, whose address before the Medical Society of the State of New York we published last month, and who is now serving his second term as Lieutenant-Governor of the Empire State, is President of the Maltine Company.

Notes and Comments.

AMERICAN MEDICAL ASSOCIATION ANNUAL ANNOUNCEMENT.—The fiftieth* annual session will be held in Columbus, Ohio, on Tuesday, Wednesday, Thursday and Friday, June 6, 7, 8 and 9, commencing on Tuesday, at 11 a. m.

"The delegates shall receive their appointment from permanently organized state medical societies, and such county and district medical societies as are recognized by representation in their respective state societies, and from the medical departments of the army, navy, and marine hospital service of the United States.

"Each state, county and district medical society entitled to representation shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: Provided, however, that the number of delegates for any particular state, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the code of ethics of the association."

Members by Application.—Members by application shall consist of such members of the state, county and district medical societies entitled to representation in this association, as shall make application in writing to the treasurer, and accompany said application with a certificate of good standing, signed by the president and secretary of the society of which they are members, and the amount of the annual membership fee, \$5.00. They shall have their names upon the roll, and have all the rights and privileges accorded to permanent members, and shall retain their membership upon the same terms.

At a recent meeting of this association the following was unanimously adopted:

Whereas, the American Medical Association did, at Detroit, in 1892, unanimously resolve to demand of all the medical colleges of the United States the adoption and observance of a standard of requirements of all candidates for the degree of doctor of medicine which should in no manner fall below the minimum standard of the Association of American Medical Colleges; and

Whereas, this demand was sent officially by the permanent secretary to the deans of every medical college in the United States, now therefore

*No meetings in 1861 and 1862.

the American Medical Association gives notice that hereafter no professor or other teacher in, nor any graduate of, any medical college in the United States, which shall after January 1, 1899, confer the degree of doctor of medicine or receive such degree on any conditions below the published standard of the Association of American Medical Colleges, will be allowed to register as either delegate or permanent member of this association.

Each delegate or permanent member, when he registers, is requested to record the name of the section, if any, that he will attend, and in which he will cast his vote for section officers.

Secretaries of medical societies, as above designated, are earnestly requested to forward, at once, lists of their delegates.

Also, that the permanent secretary may be enabled to erase from the roll the names of those who have forfeited their membership, the secretaries are, by special resolution, requested to send to him, annually, a corrected list of the membership of their respective societies.

Orations.—On Medicine, James C. Wilson, Philadelphia; on Surgery, Floyd W. McRae, Atlanta, Ga.; on State Medicine, Daniel R. Bower, Chicago. Chairman committee of arrangements, Starling Loving, Columbus.

Amendment.—Constitution, Art. IV.—Officers. Amend to read: "The following officers, viz: President, four vice-presidents, treasurer, librarian, secretary, assistant secretary, and a chairman of committee of arrangements, shall be nominated by a special committee of one member from each state represented at the meeting, and shall be elected annually by the vote on a joint ticket, and shall hold office until their successors are elected."

Sections.—"The chairman of each section shall prepare an address on the recent advancements in the branches belonging to his section, including such suggestions in regard to improvements or methods of work as he may regard important, and present the same, on the first day of the annual meeting, to the section over which he presides. The reading of such address not to occupy more than forty minutes."—*By-Laws*.

"A member desiring to read a paper before a section should forward the paper, or its title and length (not to exceed twenty minutes in reading) to the secretary of the section, at least one month before the annual meeting at which the paper or report is to be read."—*By-Laws*.

Officers of Sections.—Practice of Medicine, Frank Billings, Chicago,

chairman; Carroll E. Edson, Denver, secretary. Surgery and Anatomy W. J. Mayo, Rochester, Minn., chairman; M. L. Harris, Chicago, secretary. Obstetrics and Diseases of Women, A. H. Cordier, Kansas City, Mo., chairman; W. D. Haggard, Jr., Nashville, Tenn., secretary. Materia Medica, Pharmacy and Therapeutics, Thomas H. Stucky, Louisville, Ky., chairman; Leon L. Solomon, Louisville, Ky., secretary. Ophthalmology, Casey A. Wood, Chicago, chairman; Charles H. Williams, Boston, secretary. Laryngology and Otology, Emil Mayer, New York, chairman; Christian R. Holmes, Cincinnati, secretary. Diseases of Children, Henry E. Tuley, Louisville, Ky., chairman; L. D. Boogher, St. Louis, secretary. Physiology and Dietetics, J. Weir, Jr., Owensboro, Ky., chairman; Lee Kahn, Leadville, Colo., secretary. Neurology and Medical Jurisprudence, Frederick Peterson, New York, chairman; Hugh T. Patrick, Chicago, secretary. Cutaneous Medicine and Surgery, W. T. Corlett, Cleveland, Ohio, chairman; J. M. Blaine, Denver, Colo., secretary. State Medicine, Arthur R. Reynolds, Chicago, chairman; W. P. Munn, Denver, Colo., secretary. Stomatology, George V. I. Brown, Milwaukee, Wis., chairman; Eugene S. Talbot, Chicago, secretary.

Wm. B. Atkinson,

Permanent Secretary.

1400 Pine St., Philadelphia.

THE PARIS EXPOSITION.—Paris will soon again be the attraction of the world. Parties are already being made up to visit the exposition next year, and to many visitors from this country it will be a matter of interest to know that an American boarding house, or as the French prefer to call it a "pension", is to be started for the benefit of those who do not speak French or even if they do would like to have an opportunity of meeting with their own countrymen while abroad. Professor Wisner and his wife who are well known to many medical men in New York have taken a mansion near the Bois de Boulogne, and they intend to fit it up luxuriously so as to afford a comfortable home for their guests. It is hoped that this establishment will become the headquarters of American medical men and their families during the exposition. The Professor has already made arrangements with a number of prominent doctors who propose visiting Paris, and he would be pleased to hear from others before he leaves for that city. For the present he may be addressed at No. 605 Madison Avenue, New York City.

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Original Communications.

FEVERS OF ALABAMA.

BY CHAS. M. WATSON, A. B., M. D.,
FLORENCE, ALA.

Read before the Tri-State Medical Society of Alabama, Georgia and Tennessee, at Birmingham, Ala., Nov. 26, 1898.

MR. PRESIDENT and Gentlemen: In presenting to you this subject to-day, I find myself at a loss to refresh my memory from any text-book, as unfortunately we are entirely without text-books treating specially of Southern diseases so far as I know.

While I have the honor and pleasure of appearing before this intelligent and learned body, I feel it well to call attention to this fact, hoping that the near future will furnish Southern practitioners with a book, descriptive and otherwise of indigenous diseases commensurate with their ability as practitioners of medicine, for I do believe, gentlemen, that as practitioners of medicine Southern physicians can easily cope with any in the world. We have had our Sims, our Nott, our Gaines, our Stone, our Eve, our Briggs, our Cochran, and other truly eminent men, but no southern work on medicine which has been universally recognized and appreciated.

I wish to speak to you to-day of fevers in Alabama, not because we live in a fever stricken district, for our genial and temperate clime and our rich mountains and fertile valleys high above the sea, being as it were upon the back bone of country between the seas, together with many other natural sanitary advantages too numerous to mention here, renders life rather a struggle to the various germs, microbes, ptomaines and what not

which the penetrating eye of the microscope these latter days has brought to light. As far back as any of us remember, the best physician of the land on entering a patient's room would say "let me see your tongue" or "let me count your pulse" and after some further physical exploration would content themselves as best they could with this investigation.

Now we use these time honored methods together with a great many others which our science has demonstrated so essential in the recognition of disease. We now say let me see your tongue and let me count your pulse, please hold this thermometer under your tongue, please furnish me a specimen of the patient's urine both for chemical and microscopic examination, or send a specimen of his sputa or blood for like purposes. We count and measure his respirations, we listen to the heart's action with the stethoscope, we examine the lungs in a similar way. We look our patient carefully over from head to foot and after this we can now say let me look through you and examine your bones. The fact is we can now make our diagnosis, which is the fundamental principle underlying the successful practice of medicine with so much certainty, that we recognize diseases not upon guesses and theories but upon facts. To the man who applies his sciences to the needs of suffering humanity, I mean a successful general practitioner of medicine, there is no one subject in the broad domain of medicine more worthy of his careful study and earnest attention than fever in any of its forms, for how gratified are we on our first visiting a patient to find him with normal temperature. In this paper for the sake of convenience I wish to divide the state into three

sections, known as the northern or mountainous part of the state embracing in this territory the Birmingham district and the Tennessee valley. The third section known as the Black Belt, and last, all that section of the state lying south of the Black Belt, or in other words the rather flat pine lands of the southern part of the state. Dr. T. Gaillard Thomas in the beginning of his work on diseases of women speaks of malaria having existed on this continent to such an extent and of such a pernicious form at one time that it was almost impossible for human beings to exist here. How much of this is true we can only conjecture, but certain it is to this day that malaria enters into quite eighty or ninety per cent. of all fevers in Alabama. Now gentlemen with your consent I will take up the three divisions of the state as I have made them speaking of these forms of fever which are most prevalent in each separate section of the state. First let me say that none of these divisions of the state are entirely exempt at all times from any form of fever which exists in the others, but there certain forms of fever which prevail with more frequency and certainty in one section of Alabama than in the others. Here I will say that as to the eruptive fevers we have them equally over the state and the only allusion I wish to make of them is to say that they invariably prove of mild type in our salubrious climate. In the southern part of our state we meet most frequently with dengue fever, in some localities than with malarial hæmaturia, frequently with intermittent malarial fever, but the most obstinate form of fever there is pernicious remittent—a lower form of fever resembling typhoid in its staying qualities. There are found in this section at times some genuine cases of typhoid fever also, but the most frequent form of fever in this section is a low form of pernicious remittent fever. We of the northern part of the state look upon the southern or gulf coast as most accessible and favorable to the development and spread of yellow fever, though I believe this fever can exist in any part of our state. We have also in this section a mixed fever—partaking the

characteristics of both typhoid and malarial fever. We come now to the second division which I have made of our state and which I have designated as the Black Belt. In this district, while we have sometimes true typhoid and some localities in this belt of country quite a good deal of malarial hæmaturia, sometimes dengue, sometimes pernicious remittent fever, but here I consider is the home you might say of intermittent or true malarial fever—so-called chills and fever and where quinia does such excellent work. Here also we have what is called true bilious fever. We find also in this section the same form of mixed fever as in the extreme southern part, that is typhoid complicated with malaria. Coming now to the third and last division, the northern part of the state, we find the same character of fevers with a decided tendency to typhoid, perhaps more typhoid than in either of the other districts.

In the conclusion drawn from the above, I think I can say that we have to deal with in Alabama principally three forms of fever, namely: true malarial, a mixed fever typhoid complicated with malaria and called first typho-malarial fever by Dr. Woodward of the United States army, and third and last true typhoid fever, and to these three forms of fever I wish to devote the remainder of this paper. Taking them as they come I will first speak of malarial fevers, referring to most of the various forms which we find in Alabama.

Most teachers of medicine and pathologists to-day assert that fever has its origin and existence in the muscles of the body. Laveran was among the first to call attention to malarial germs or the hæmatozoon of malaria, but in this country, Dr. Osler, of Johns Hopkins University, Baltimore, Md., has succeeded in his pathological researches in isolating the different germs found to exist in the blood of patients suffering with various forms of malaria and malarial fevers. Whether his work along this line will stand the test of time remains to be seen, but certain it is that his efforts are most commendable and will serve as worthy landmarks if nothing more to the future.

development of this branch of our science. Other capable men in the profession are now at work in the same direction, but the general practitioner cannot resort to microscopical examinations of the blood in treating his fever patients, but must depend upon symptoms subjective and objective to which he must apply his physic scientifically. These symptoms may be so revealed by microscopic and pathological research that they will become the true guide to the scientific application of medicine in his hands.

The essential in the treatment of all diseases is to remove the cause. What we need in applied medicine is specific treatment, something which will strike the root of the evil. Dr. Osler's efforts, though undeveloped, are in this direction. The thinking physician of to-day fully realizes the paramount value of microscopic and pathological work. To this branch of our science we are indebted for the great stride we have made in the nineteenth century, namely, antiseptic medicine externally and internally. Those who have had clinical experience with malaria will readily agree with me that we have a malady of many and extreme varieties. Malaria is severe to a greater or less degree, according to the type it assumes, whether this is due to the amount of malaria taken into the system, or the character of the poison, or to the length of time the poison has already existed in the system, I do not know, but I do know that there are forms of malaria much graver than other forms. Again there are certain localities in the same county which give us almost annually pernicious forms of malaria. To these conditions I think we can safely look to local causes. As to the contagion of malaria, I will say that I believe all diseases are contagious to a greater or less degree, being more contagious when they exist in the most malignant forms. I will not speak of the non-malignant forms of malarial fever as we know that this condition can be relieved by the timely use of alimentary antiseptics and cholagogue cathartics, together with the free use of quinia and arsenic.

Now passing on to the pernicious or malignant forms of malarial fevers I find that we have the congestive and the congestive hemorrhagic forms. Under the congestive form I include malarial toxemia and the so-called congestive chill and which often proves fatal with the third paroxysm. Under the congestive hemorrhagic form we have malarial hæmaturia, hemorrhage from the kidney, so-called yellow chills—sometimes in this form of malaria the hemorrhage comes as an epistaxis—sometimes as enteric hemorrhage or bleeding from the bowel and third and last we have, as I believe, the most malignant form when we have hemorrhage from the stomach, the characteristic black vomit of yellow fever. Believing as I do, gentlemen, that yellow fever is nothing more or less than malarial fever existing in its most pernicious, malignant and contagious form, I wish to dwell a little upon this point, hoping thereby to illicit sufficient attention and criticism from the profession to condemn or sustain my opinion. I have arrived at this conclusion by analogy and comparison and will proceed to call your attention to this comparison. In the first place pathologists tell us that the spores, or germs or toxins found in the blood of the same patient with malaria differ at times and during certain stages of the disease, can't we reason that the same pathological conditions would hold good, varying as the malady assumes different and more malignant types? Again we all know that malaria exists to a greater degree during the heated season and we know that a frost is the most certain check to yellow fever.

Again we know that yellow fever and malaria both exist to a greater degree the further south we go and along water courses—some localities being more susceptible to both. Whether yellow fever is indigenous or not to the southern coast of the United States is a question.

We all know that the stomach becomes very much involved in all forms of malaria, we also know that the stomach is the seat of hemorrhage in yellow fever. We know that exposure to both malaria and yellow fever is worse during the night than

during the day. I have asked a number of noted physicians who lived and practiced medicine in malarial districts their treatment for pernicious malaria, they all answered calomel and quinia in heroic doses. I asked an English physician, who had practiced in epidemics of yellow fever in the West Indies, in Cuba and in the United States, what drugs he thought had given him the best results in yellow fever—he said calomel and quinia in heroic doses.

Again many physicians and even experts differ as to their diagnosis between pernicious malarial fever and yellow fever, so closely do they resemble each other. What the unsatisfied and untiring pathologist with his all-seeing and powerful microscope, working in his attic among the bugs, will bring to light on this subject, we await with unusual interest to see, for the microscope has already revealed the greatest variety of spores or germs in malaria than any other one disease.

The more malignant type the malaria assumes the greater the tendency to hemorrhage and we all know the hemorrhagic tendency of yellow fever. I know of no specific treatment for yellow fever, neither do I know of any for pernicious or malignant malarial fever, unless it is quinia and arsenic and these fail quite often. I have used in acute and chronic malaria Dr. Edson's hypodermic method of phenol-pilocarpin, which he calls aseptoline and I may say that I have had good results, but I do not regard it as a specific, however, I think his method is based upon science and is well worth the consideration of the profession.

As to the coal-tar preparations, that is the antipyretics, I favor their judicious use when needed. The abuse of any drug is not a fit argument for the disuse of the drug.

There is no better antiseptic for the gut than calomel used with judgment and care. When you have a genuine case of pernicious malaria with well marked paroxysms, in my judgment, quinia in large doses should be given. The profession is somewhat divided as to the treatment of malarial hæmaturia and undoubtedly we need more light upon this form of malaria. I have had three

or four patients in my practice to give every symptom of malarial hæmaturia, except renal hemorrhage and fever. These patients died and I think from malarial toxæmia. Some physicians use quinia extensively in their treatment of malarial hæmaturia, others condemn it. Some use morphia and atropia, others condemn this. Some use turpentine internally, others condemn this practice. Some believe in the administration of hyposulphite and phosphate soda. A large per cent. are in favor of calomel. Some use iron and ergot, others again condemn this. If quinia is used it should be given in large doses either by the mouth or hypodermically. There is never any contra-indication for morphia and atropia when needed in the treatment of hæmaturia. I also use strychnia a great deal when indicated in any form of malaria. First I believe in the use of calomel and quinia in all forms of uncomplicated malaria, than the use of any other drug at any time during the treatment which may be indicated. When we give a drug in treating any malady we give it to get its effect. I believe most diseases have been augmented in their intensity in the past few years by the lasting and depressing effects of la grippe. In reducing the high temperature of fevers, I prefer the use of acetanilid and water. Sometimes a dose of morphia and atropia hypodermically will not only quiet the patient in high fevers, but will reduce the temperature. Here I will say that I advocate most heartily hypodermic medication, for given by this method medicines act more speedily and more directly upon the system. With due consideration for the various tonics, Warburg's tincture, etc., the following formula has always given me the best results in chronic malaria:

R Quinia sulph., 3 ij.
Aromatic sulph. acid, 3 iv.
Tinct. chlor ferri, 3 ij.
Liq. potassa arsen., 3 iv.
Strychnia sulph., gr. j.
Elix. orange, q. s. 3 viij.

Sig. Shake and give teaspoonful in wineglass of water before meals and at bedtime if necessary.

A very worthy pathologist has said that "there was a form of mala-

ria in this section evidenced by a small extra-corpuscular hyaline body which resisted quinia." He emphasized the fact that "unless clear-cut paroxysms prevailed, quinia was useless," but to say off-hand that because a certain fever resisted quinia it was not malarial was both dogmatic and unscientific.

The very authorities who make such statements do not even tell us when, how and what quantity to give in a given case.

You will readily see, gentlemen, that the laws of medicine differ from those of the Medes and Persians. As to all conditional fevers such as nervous, catarrhal, etc., which we sometimes find in Alabama, I refer you to the authorities for their consideration. Coming now to typhoid or typhoid complicated with malaria, which we have found to exist throughout the state, I will say a large majority of these cases recover with us by judicious care and treatment. We are not absolutely certain how either the germs of typhoid fever or malaria enter the blood, but as typhoid fever is an enteric fever, we believe that the typhoid bacilli first enter through the alimentary canal either in the food, water or other fluids taken into the stomach.

Now, "cleanliness is next to Godliness," but cleanliness of skin and clothing, while very essential is far different from antiseptic cleanliness externally and internally, at this age of enlightenment we ought to be extremely careful what we take into the stomach. Quinia is considered to be an antidote or prophylactic to malaria, but we have no known antidote or prophylactic for typhoid fever unless it be antiseptic food and drinks. Typhoid fever in the camps of our soldiers in the late Hispano-American war admonishes us that we must regard typhoid fever from a prophylactic standpoint. We must pay more attention to sanitary measures from every standpoint. The condition of these soldiers was indeed unfortunate, but under the circumstances perhaps unavoidable. Fevers in their initiatory stages perhaps by proper treatment can be aborted, but after this stage is passed I doubt if this can be done, at the same time they can be greatly ameliorated and

shortened by proper treatment. Quinia has no decided beneficial effect upon typhoid fever, neither does it exert much if any good in typhoid complicated with malaria. I will not enter into a detailed description of this mixed fever, as we are all versed in both malaria and typhoid fever, but I wish to speak of a few characteristics of this fever.

There is little or no co-ordination between the pulse and the temperature in this fever. I have found in some cases pulse of 80 or 90 to the minute and temperature of 103 or 104. Frequently from the pulse one would be entirely misled as to the stage of fever in this disease. This fever is preceded by a forming stage of longer duration than simple remittent fever and the gravity of the disease is far greater. It is caused by the combined action of malaria and the specific cause of typhoid fever. There is no metamorphosis of one disease into the other, but a combination of both diseases in the patient. The existence of one does not abate the other.

I have on several occasions had two or more patients in the same neighborhood, nearly the same age, taken alike with this fever, and with all their symptoms analogous, their condition, surroundings, and even their temperature the same, yet one patient would have a slow, harsh, corded pulse of perhaps ninety or one hundred, and the other patient with full, fast and bounding pulse of one hundred and twenty-five to the minute. Now it has been my experience that the patient with full, rapid and bounding pulse would recover more rapidly and favorably than the other. These conditions being at the beginning of the fever, the only explanation I can offer is the rapid, full pulse indicates malaria, while the slow pulse indicates typhoid.

Again I have had the pulse and temperature to drop below normal, followed by rise of fever in a few hours, and this without fatal results. Speaking from a microscopical and pathological standpoint these fevers are undergoing a series of investigation and experimentation, and as we have nothing which is absolutely certain thus far in this department,

I prefer not to tax you here with a detailed description along this line, but will speak of them from a clinical point, and with some reference to treatment at the same time.

There are two types of this fever, one with temperature not exceeding one hundred and three degrees, considered mild or benign; the other with temperature persistently above one hundred and three degrees, considered pernicious or malignant. Generally the large glands are involved, the liver, spleen and kidneys. The nervous system is very much involved, and in some cases entirely shattered, so to speak. The stomach is nauseated in some cases to such an extent that it taxes our ability beyond measure to give relief. The appetite subsides entirely, and the patient is averse to nourishment of any kind. The bowels are more or less sore and tender to pressure. The urine generally is scant and of high color, but no albumen. Sometimes the skin becomes jaundiced; the tongue dry and red, with heavy, thick coating in the centre. In some cases we have no paroxysm, in others one or more paroxysms. For a more descriptive clinical history and symptomatology I refer you to articles upon typhoid fever. Now since quinia can be practically eliminated from the treatment of this fever, we will speak of the treatment of typhoid and typhoid complicated with malaria under the same head.

What experience teaches us in this form of fever is an antiseptic treatment from beginning to end, with supporting nutriment, relieving pain and nervousness, and reducing high temperature. As to nourishment, pure, good butter milk, liquid peptonoids, chicken broth, beef extract or tea, etc. I have never derived the good from sweet milk that is usually claimed for it. We ought to use common sense in nourishing the sick. I believe in feeding the sick, and in giving them medicine you should select such articles as your good common sense and judgment dictates in the case. The patient must be nourished, however.

For restlessness morphia and atropia hypodermically is excellent, chloral hydrate, sulfonal, antikamnia, etc., are all good. I like turpentine

internally and a liniment of turpentine and camphor externally over the bowels for soreness. For tympanitis the corolin douche, and if the fecal matter is tinged with blood or of prune juice color, the douching to be followed by injection of starch and laudanum water into the bowel. Ergot is useful to control hemorrhage from the bowel. Boric acid, salol, borolyptol, etc., are good intestinal antiseptics. In fact, a good external antiseptic is generally a good internal antiseptic.

Washing out the stomach with antiseptic water frequently relieves nausea. Strychnia and digitalis can be used when indicated either hypodermically or by the mouth.

Brand's method of reducing fever by tubbing is now, I think, universally appreciated and approved. When this method is used alcohol in some form is administered to sustain the patient. If we cannot use the tub bath, we can at least thoroughly sponge the patient or apply wet sheets or cloths to the entire body of the patient. Tubbing or sponging can be resorted to every thirty minutes if necessary to reduce the temperature. Ice bags can and may be applied to the head. There is no harm in the judicious use of some one of the coal-tar antipyretics. I prefer acetanilid. The patient can be sustained under its influence by alcohol just as is done in Brand's method of tubbing. Acetanilid I believe to be a good internal antiseptic also. Now, as I have never used the Woodbridge treatment, I cannot indorse it as a whole, but I have taken some cues from it which have served me well. The good points, as I see them, in this treatment are first giving the patient sterilized or boiled water, using homœopathic doses of antiseptic and cholagogue medicine, particularly the mit. chlor. hydrog. and podophillin; keeping a continual flow of bile into the alimentary canal, and at the same time causing the bowel to throw off its poisonous matter as rapidly as is possible without taxing the vitality of the patient to too great an extent. To sum up the Woodbridge treatment, it is evidently an antiseptic method of medication. I believe this treatment, or any similar treat-

ment, will be followed by far greater success if used in the initiatory stages of the fever.

It is very easy for the salons of the profession to sit in their temples of wisdom and condemn and do nothing, but suffering humanity will ever raise its voice and lift its hand reaching beyond them to the helpers and workers in the profession.

THE PROPER DOSAGE OF THIALION.

BY E. M. SMITH, M. D.,
NEWTOWN, CONN.

Ex-Vice-President of the Danbury Medical Society;
Member American Medical Association; Fairfield
County Medical Society; Connecticut Medical Society, etc.

NOW THAT thialion has passed through the stage of experimentation and has become to the general practitioner a real help in need, especially in the treatment of that multitude of cases resulting from an excess of uric acid in the blood—rheumatic diathesis—gouty conditions from any cause, it seems to me that it would be rendering the profession a valuable service if I should say in a few words something as to the manner of its proper administration.

There seems to be a good deal of darkness on this subject. Every little while, in consultation or otherwise, I come in contact with some doctor who has been giving thialion in a wrong way. Either in too large or too small doses. He has not exercised that care and skill that would characterize the administration of quinine or morphine, and has not gone into the real physical condition of the patient.

I am confident that in thialion we have an excellent remedy. This conclusion I have arrived at not only from the results obtained in my practice, but also from its use in my own family. I believe it to be a powerful agent for good.

Now in regard to the dose, I find as a rule that the doses given are too large. Too large, first, because a large dose tastes worse than a small one; second, because it is unnecessary; thirdly, because sometimes in certain cases it acts unpleasantly on the bowels. My rule as evolved from

experience is that unless I have a case uræmic poisoning or threatened uric acid poisoning, such as we meet with in the later stages of pregnancy, or in cases of Bright's disease, or in some such condition, where it is exceedingly important that we eliminate the poison as rapidly as possible and where it is imperative that we increase the flow of urine quickly, then the dose can not be given too rapidly nor too frequently; but in ordinary cases I believe that smaller doses are better. My plan is except in, say, acute uric acid poisoning acute rheumatic gout, or where I have a violent case of uric acid headache, where it is necessary to give a dose three times a day to make the urine rapidly alkaline, to direct my patient upon rising in the morning to take a medium teaspoonful of the thialion dissolved in a cupful of hot water just hot enough to be drunk down at once. Then let him go to his breakfast and, as a rule, in ninety cases out of a hundred, in fifteen or twenty minutes after breakfast a large mushy movement will be the result.

It is peculiar, but I find that if this morning meal is omitted and nothing is taken until the noon meal the desired result is not obtained. I think that this is easily explained by the fact that after the ingestion of food the peristaltic action of the bowels is increased, and if a laxative is present there its action very quickly becomes apparent, so that it is necessary to advise your patient that it is especially desirable to have this movement, and that this can be obtained best by taking the morning meal after he has taken the thialion in hot water. In cases of chronic constipation, especially, is this plan desirable. This dose should be continued every morning for a week, or until it is found that the urine has cleared, leaving no sediment, and is of a pale straw color. Then I advise the patient take it every other day for a week; then for two days another week, and then whenever it is necessary for him to get the desired results.

In cases of acute rheumatism I have found that where I wanted to get a very marked result quickly one-half teaspoonful dissolved in

two-thirds of a cup of water and taken every two hours as hot as possible, will not affect the bowels nearly so actively nor so unpleasantly as a teaspoonful in hot water every four hours would do, or even three times a day.

As a rule I do not find that patients object to the taste of thialion. It is not so bad a taste as a Seidletz powder. But once in a while you will find a person who objects to it, and I am indebted to Prof. Augustin H. Goelet, M. D., of New York, for a suggestion which he made in an article entitled "Preparation of the Patient for Abdominal Operations," which was published in the *Charlotte Medical Journal*, Charlotte, N. C., in December, 1898. The suggestion is that the flat taste of the medicine can be counteracted by putting in the water a small piece of lemon peel. Since seeing this I have followed it in many cases and find it to give a good deal of satisfaction.

It is necessary for us to remember that in thialion we have a powerful remedy. Take a given case where it is administered three times a day for three days, it is very necessary that we watch the urine carefully, testing it with litmus paper. It will be seen that the urine rapidly approaches the point of alkalinity. Of course we must watch for this; it won't do to go unheedingly along, leaving the patient with an irritating alkaline urine. It is necessary for us to stop here, and in my practice I always stop at a point on the acid side. Then a small dose administered once or twice a day keeps the urine at a point between acidity and alkalinity, and if we watch carefully we will find that uric acid goes away in drifts and loads under its action.

Again in chronic constipation I have heard doctors say that they had given two or three doses with no results. If they live forever that will be just the way with some cases. You take an old case of chronic constipation, or an old case of torpid liver, or, what is more to the point, these two conditions combined in one case, and it will take a dose of thialion for four or five days before the desired action is attained. Then he will wish he had gone out in a ten acre lot, for the odor in such a

case is something terrible, and the color black. Now a dose every morning will act promptly and cure the patient. Ask the patient how he feels then, and you will get an answer right away.

Dr. G. E. Lemmer, President of the Danbury Medical Society, in a paper read before that Society entitled "Uric Acid in the Blood: What Does It Lead to, and How Can We Eliminate It," published in *THE NEW ENGLAND MEDICAL MONTHLY* for October, 1898, emphasizes this point.

Prof. C. A. L. Reed, Cincinnati, Ohio in a paper entitled "The Genital Factor in Certain Cases of Neurasthenia in Women," published in *Gaillard's Medical Journal*, Jan. 1899, points out that it is sometimes wise—in fact he has got quite in the habit, when only one dose is given a day, of giving it a little while before retiring. He says: "It is an innovation, I believe, in the manner of using it, but I have been able easily to thus perpetuate its once established effects by a minimum of both drug and dosage." This plan I have followed in several cases and have found that as in the cases where administered in the morning all those morbid elements, better outside of the body than inside, were eliminated.

In uræmic poisoning, the effect must be rapid and the patient must be brought under its influence as quickly as possible. In some cases I have given it as often as a teaspoonful every two hours till the catharsis and urination were very free, but the result of eliminating the poisons from the system and increasing the flow of urine markedly, but the flow is not so much nor so important as are the products which are carried off by it.

The following three cases will illustrate some of the points I have given for your consideration:

Mrs. B., American, age 47, now passing menopause, is recovering from acute nephritis—urine scanty, high in specific gravity, exceedingly acid, liver torpid and inactive, bowels sluggish, torpid and inactive; a marked degree of mental hebetude.

This patient gave me considerable anxiety, inasmuch as I had given

her almost all the diuretics with indifferent results—a little better now, not so well a little later.

I finally put her on thialion in teaspoonful doses thoroughly dissolved in a cupful of hot water each morning, insisting upon the dose being taken as soon after waking as possible, and to be drunk as hot as she could. It was but a few days before improvement began all along the line. There was a general amendment—urine increased in quantity and nearly approached the neutral line, bowels acted in the most satisfactory manner. In this case the liver played an important part. This was stimulated until the stools became like that of the child. Mind cleared up, becoming very natural. She is now on the way to complete recovery, though I still insist that she take thialion three or four times in succession every two weeks. In this case the different symptoms added to the mental condition made it doubtful whether she could ever recover, but I feel confident that this most happy result will take place.

CASE II. Mr. M., aged 33, stout and heavy, farmer, weight 210 pounds, necessary that he ride a good deal over rough roads, has decided uric acid diathesis, urine clouded and highly acid, irritation at the neck of bladder, constipation, enlargement of the liver, much muscular aching all over the body, heavy, dull aching pain over the kidneys, becomes easily tired. In fact he presented all of those typical symptoms which follow in the train of uric acid diathesis where the bowels are constipated and the liver sluggish.

I did everything for him, but with indifferent success until I began using thialion in teaspoonful doses in hot water three times a day. There was a very decided action of the bowels and kidneys, in fact, so much so that it was necessary for him to suspend taking the remedy for two days, when I returned giving him a small dose each morning in hot water as usual on rising. The improvement in this case was rapid, steady and uninterrupted. And while it is a long time since I prescribed for him, yet whenever he feels a return of the old symptoms a few doses of

thialion, he says, fixes him all right again. Can you look into the mirror of your experience and duplicate this case? Can you see how many times it has bothered you to cope with such symptoms? *Verbum sat.*

CASE III. Miss C., age 35, short and stout, bilious by habit, slow by temperament, chronically constipated with small and insufficient evacuation of the bowels, urine scanty and highly colored with considerable brick dust sediment, skin and conjunctiva dark and muddy looking, suffered much from back ache and drowsiness, with considerable muscular pains and aching.

This woman had been under a variety of treatment under not only my hands but under the hands of others with unsatisfactory results. Thialion administered in teaspoonful doses each morning with corrected diet soon gave relief and all the prominent symptoms faded away. Urine increased in quantity and urates were found in excess. Bowels moved freely and the eyes and skin resumed their natural color. She continued the treatment for two weeks, and so far as I can judge a permanent cure has been effected.

THE ABSORPTION VERSUS THE DIGESTION OF MILK.*

BY L. DUNCAN BULKLEY, A. M., M. D.
NEW YORK CITY.

Physician to the New York Skin and Cancer Hospital;
Consulting Physician to the New York
Hospital, etc.

NEITHER words nor argument are necessary to show the advantage of milk as a nutriment. Millions of human beings, from the cradle to the grave, have proved its life-giving powers, and untold millions will continue to use it, wholly ignorant of any physiologic facts concerning its mode of influencing nutrition, and guided only by instinct, which in animals is unerring, but which in man is often perverted by the elements of civilization.

Milk is food. Alone and unassisted it is capable not only of sustaining life for an indefinite period, but it fur-

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nishes all the elements for the complete construction of the human frame; on it alone the infant learns to talk and walk, and develops all the tissues of the system. Adults have lived on it alone for weeks or months, and by it convalescents from grave sicknesses have recovered vitality and strength. Milk is a complex and delicate substance. While composed very largely of water—87 per cent. in an average good specimen—the remaining 13 per cent. contains a variety of substances wonderfully united, chemically and mechanically, in a manner suitable for absorption and appropriation by the economy.

It is not the purpose of this paper to discuss the value of milk as a nutriment, nor to study its composition or chemistry, but only to present fully a practical theory in regard to the physiology of its *absorption*, under proper circumstances, as opposed to the commonly received notion that it must undergo *digestion* before it is assimilated in the system; and to this we will immediately proceed.

Some years ago a number of observers reported the intravenous injection of milk. It is not necessary here to recount the experiments and experiences; suffice to say that reliable men have succeeded in introducing pure milk directly into the veins of patients, where it has mingled with the blood, going first to the lungs, without any thought to digestion, such as takes place in the alimentary canal. These patients lived and thrived under the process.

This intravenous injection and assimilation of milk first called the writer's attention to the fact that this substance could be thus appropriated by the system without digestion, and led to the study and development of the theory to be propounded, which he has put in practical application for ten or fifteen years, in hundreds and perhaps thousands of cases, and which daily experience confirms in a most substantial manner. I may say that the theory has been partially presented from time to time before medical societies and to friends, and also casually mentioned in writing; and while objections have been raised, these have generally been satisfactorily met and the plan proposed has been adopted successfully by very

many, who, I am sure, would gladly bear witness if they were present. I may mention that the late Drs. Marion Sims and Frank Hamilton accepted the theory and acted on it during the latter years of their lives; also that the late physiologist, Dr. John C. Dalton, entirely acquiesced in its correctness, and Dr. Wesley Mills, professor of physiology at McGill University, Montreal, lately acknowledged the truth of the proposition.

Recognizing that milk could enter the system without passing through stomach digestion, I began to consider under what physiologic conditions this could be effected other than by intravenous injection. An analogy to the absorption of milk was found in the chyle and its discharge into the venous blood in the subclavian vein and vena cava on its way to the pulmonary circulation. When examined microscopically the chyle is hardly to be distinguished from rich milk, and it was argued that the milk globules could pass unchanged by the same channels through which the elements of the chyle were absorbed from the stomach and intestines; the problem was to present the milk in such a manner to the absorbents that it could be taken up immediately without having to undergo the process of coagulation, caseation and subsequent gastric digestion. Remembering that the blood was alkaline, the chyle alkaline, and normal milk also alkaline, it was suggested that if the milk could be presented to the absorbents in an alkaline state, and at a proper temperature, absorption might take place immediately without the intermediate process of digestion.

The activity of the stomach is such, as shown by the well-known experiments on Alexis St. Martin and others, that with the least excitation gastric juice is immediately poured out, which would, of course, at once coagulate some portion of the milk; and from this it would continue until all the milk was attacked, coagulated, and digested. The problem was, therefore, to introduce the milk in such a manner that there should be no stomach activity and no secretion of gastric juice. Plainly then, it must be given quite apart from all solid food, or any substance or condition which would excite gastric secretion.

Even the least amount of acidity from a preceding meal would coagulate some of the milk and so start on the whole process of caseation and digestion.

Physiologically it is well recognized that the stomach in health does not ordinarily secrete gastric juice except under the stimulus of food. At a varying period after the taking of food, the time being dependent upon the amount and quality of the food taken and the powers of digestion, the stomach has finished its task, absorption of certain elements has taken place, some portions have been passed on to the intestine, for further action, and the stomach is found to be empty, awaiting further cause for activity. At this period the stomach loses its turgid red color, becomes paler and more or less flaccid, and its surface is bathed with more or less of an alkaline secretion, this constituting the alkaline tide. As stated, this occurs at varying periods of time after the ingestion of food; it may occur in an hour or so after a very small amount of very digestible food, or not for four, five, or even many more hours after a very heavy or unusually indigestible meal, or with very weak or sluggish digestion. This should constantly be borne in mind in connection with the plan of treatment to be proposed, otherwise failure is sure to result. It is only when this alkaline tide is perfectly secured and utilized that the real beneficial results of this plan can be secured.

The idea, then, is to introduce the milk, pure and alone, and at the body temperature, just after this alkaline tide has set in, or during its continuance, and to avoid food or any substance which could call forth gastric secretion until after its absorption has been fully accomplished. It is believed, then, that the warm alkaline milk is absorbed directly by the lacteals and carried at once by the thoracic duct into the subclavian vein, and so reaches the blood and is acted upon in the lungs before it is submitted to liver action.

In contrast to this stands the physiologic process which takes place when the milk is taken with other food and submitted to ordinary gastric and intestinal digestion. Here, after being acted upon by the gastric and

intestinal juices its casein passes through the state of proteose into peptone and thence through the portal circulation into the liver, to be transformed into urea.

It is difficult to present absolute physiologic proof of the mode of *absorption* of milk here claimed, as opposed to its *digestion*, under the circumstances detailed, but strongly corroborative evidence is furnished in some experiments made by Dr. Andrew H. Smith, of New York, who has kindly consented to my mentioning them. Some years ago, while experimenting on kittens, to determine certain facts in regard to blood pressure, he accidentally wounded the jugular vein. To his surprise, the blood from it appeared of a lighter color than expected, and in marked contrast to that obtained from the saphenous vein. Taking another kitten from the mother's breasts, he opened the jugular vein and found the same condition, and, I believe, he did the same with the third nursing kitten. He says that he could never explain the phenomenon until I propounded to him the theory of milk absorption, in full, which he at once accepted and regarded as an explanation of the condition found in the kittens; the milk being absorbed at once by the lacteals was poured by the thoracic duct into the subclavian vein and found ready exit on the opening of the jugular. I remarked to him that he had supplied the one missing link in support of my theory. It would be interesting to test the condition of the stomach, after taking milk on this plan, by means of the stomach-tube, but possibly this procedure might of itself excite gastric activity, which would confuse matters and vitiate the value of the experiment.

It would lead us too far from the practical object of this paper to attempt to enter at all fully into the physiology of digestion and assimilation, or to elaborate any of the physiologic chemistry of the subject. Suffice to say that this difference in the course which milk can take under varying circumstances becomes clearly evident, clinically and practically, with close and sufficient observation. Proof could be furnished by hundreds of cases in which the present writer has carefully directed

this plan of taking milk and has observed and recorded the facts. Constantly those who have been quite unable to use milk in the ordinary way, have followed the plan proposed, with the most satisfactory results. In the writer's own person, milk taken in the ordinary manner and with food invariably disagrees, causing sick headache and functional liver disturbances, whereas, following the plan proposed, he has taken a quart of milk daily for ten or more years with the greatest benefit.

A few words may be added in regard to the practical features of the subject. It has constantly happened to the writer that patients have returned, after full directions had been given, as was believed, with the statement that the plan was not successful, and that it was impossible for them to take milk, as had always been the case. In some instances undoubtedly there may be such an aversion to milk, or such an idiosyncrasy in the patient, that even this plan does not succeed. But almost invariably it has been found that the want of success was due to some failure in carrying out the plan proposed; for it must be clearly understood and most strongly and forcibly declared, that unless the theory is perfectly acted upon and the plan absolutely carried out as to its details, the results claimed cannot be expected. But after an experience with it of ten or fifteen years, and with the most varied and often difficult class of patients, and with many temporary failures, I again assert that when perfectly carried out results can be obtained which are of the greatest and most lasting benefit; there is hardly a single fact in medicine or feature in therapeutics of which I am more confident. It is sometimes difficult, however, to succeed at first in getting patients to carry out the plan exactly, for it must be remembered that the smallest possible amount of gastric juice or acidity will cause some portion of the milk to be coagulated; and when this digestive process is once begun, even in the slightest degree, it must go on until all the milk has been attacked and digested.

In many instances I have found that patients had taken with the milk

a small amount of food, as a cracker, following the advice of a former physician or that of friends. Again, some will put an egg in the milk, or add whiskey or brandy, and in many ways I have had the correct operation of the plan interfered with. It repeatedly happens that the milk is taken too soon after a meal, or perhaps even when a long enough interval of time has elapsed, it has happened that owing to a sluggish digestion it has come upon the products of a former meal, and not during the alkaline tide. Thus, patients will often take milk at half-past ten or eleven in the morning or at three or four in the afternoon, because at that time they had felt a faint and "gone-feeling" and mistook the uncomfortable sensation of delayed digestion for hunger. It will, therefore, often be very difficult to be sure that the stomach has reached the alkaline condition, when only the milk can be taken with advantage. My rule is not to have it taken longer than an hour before the coming meal, but under proper conditions it may sometimes be taken even up to thirty minutes before eating, although this is rarely the case.

Occasionally, if the digestion is sluggish, it is necessary to administer pepsin or other digestives very freely and repeatedly, to secure an empty stomach early enough; and at times when there is any doubt, I have taken one or more doses of bicarbonate of soda half an hour or so before taking the milk. It is also often advantageous to put a little bicarbonate of soda into the milk, if there is any question as to its perfect alkalinity or as to the alkaline state of the stomach. But these measures will not be successful if there is food or any remains of an acid digestion.

The temperature of the milk is also an element of importance. If taken iced cold the perfect action of the plan is frequently interfered with; the effort to warm the milk in the stomach, which is necessary before absorption, will often seem to give an occasion for an attempt at stomach digestion, and a sensation of pressure and discomfort will follow, which is far different from the agreeable sensations accompanying its proper use. My directions, therefore, are that the

milk shall be made of the body temperature, by heating it carefully in hot water, if possible; if boiled so as to produce the slightest scum on the surface, and this is taken, it acts prejudiciously by exciting gastric action, and the aim of the process is defeated. It is often desirable to warm the milk by the addition of hot water, as absorption is even more readily affected thus than when the milk is too rich and thick.

I have also often seen harm done when cream has risen, and had been stirred into the milk, forming flakes; these small solid particles being incapable of immediate absorption may result in causing the secretion of gastric or pancreatic fluid in the process of digestion.

Many of these points—and more could be mentioned—may seem trivial and unnecessary, but long experience in following the plan proposed under the most diverse circumstances, has convinced me that in this, as in so many other medical matters, attention to details is of the utmost importance; and, as reiterated here more than once, it is essential that the plan be perfectly followed in every detail, in order to obtain perfect success.

When prescribing milk according to the plan proposed, pure, warm and alone, one hour before meals, patients often object that it would destroy what appetite they have. But it is an interesting fact, based on physiologic reasons, that when thus taken successfully it not only does not impair the appetite, but greatly increases it. If a particle of food, as a cracker, is taken with it, or if for some reason or fault it does not act exactly rightly, then the appetite is impaired; naturally so, because there is a process of digestion which takes a longer time than the hour, or rather half-hour required for its absorption, and the stomach cannot be ready for fresh food again so soon.

The physiologic basis for the improvement of the appetite is simple. The process of secretion from the glands of the stomach and elsewhere, depends largely upon osmosis and blood pressure. By the quick absorption of milk the pressure of the blood in the capillaries is increased, and a richer blood is offered for the

production of the gastric juice. This improvement in the appetite under this plan of treatment has been observed by myself and others in dozens of instances.

A common time for administering milk with me, especially in poorly nourished females, is in the morning, one hour before breakfast, the directions being that the patient shall lie still for a quarter of an hour thereafter; it is often found then that instead of rising fatigued, with no appetite for breakfast, the patient gains in strength and enters on the day with a vigor quite unknown before. I also very commonly have weak females lie down in a darkened room for a half-hour nap after taking the milk at 12 and 5 o'clock. I could give many, many instances where the transformation of the patient by this simple procedure has been really marvelous. The soporific qualities of warm milk at bedtime or in the night are sometimes remarkable.

I trust I may be pardoned for my seeming enthusiasm in regard to the plan proposed, for it is presented after mature thought and very extensive experience, dating back many years; and I only wish to make this theory and plan so clear and plain that many may be led to adopt it in daily practice, feeling sure that if properly understood and faithfully carried out, their experience will be the same as mine and that of many other physicians, who have accepted and worked upon it.

DISCUSSION.

DR. ROBERT H. BABCOCK, Chicago— I desire to add my testimonial to the efficacy of milk taken in accordance with Dr. Bulkley's method. Since having learned of this way of drinking milk two years ago, I have so prescribed it to many patients, and with but one exception, I think, they have experienced no difficulty in its assimilation. On the contrary, it has been well borne, and, what was almost incredible to me at first, it has been found not to interfere with appetite for, and digestion of, the following meal. I am at a loss to explain why milk taken in this manner, should agree better and apparently be absorbed or assimilated differently from that drank at meal-time

but I am convinced that some difference does exist. So firmly rooted are the teachings of physiology in my mind that I am not able to accept Dr. Bulkley's explanation of its absorption directly, as unaltered milk. It may be that being bland and warm the milk is allowed by the empty stomach to pass through into the duodenum; but how it can escape the action of the milk-curdling ferment of the pancreatic secretion, I cannot understand. Of course, the cream, or fat of the milk can be taken up by the lacteals at once, since it is already in a state of fine emulsion, while the water and the salts in solution might be quickly and directly absorbed; but I confess I cannot understand, as yet, what is done with the casein if it is not subjected to digestion in the small intestine. However, my failure to understand the mechanism of its digestion, or absorption without digestion, offers no barrier to my acceptance of its clinical value when taken in the manner devised by the distinguished author of the paper.

DR. H. W. SCAIFE, Chicago—My objection to Dr. Bulkley's theory is this: He asks us to believe that milk is absorbed by the lacteals as water would be by a sponge, and is conveyed to the veins unchanged. His theory is entirely groundless; his idea of assimilation old-fashioned. The walls of the intestines do not act like inanimate membrane. "The act of seizing food," says Binet, "belongs to living tissue. It is not a chemic nor a physio-chemic, but a physiologic phenomenon." So it is entirely inadmissible, that by his method of administration or any other method, milk can pass through the living tissue without change. His clinical facts are good, his theory to explain which is entirely false, and if he injects milk into the veins of any animal, he will not feed it, but kill it.

DR. C. B. VAN ZANT, Denver—Dr. Bulkley's paper, being based upon such a large amount of clinical experience, the value of the method which Dr. Bulkley advocates cannot be gain-said. With his theoretic explanation, however, of the physiology of this process we must heartily disagree. It is contrary to all the present teachings of physiology to sup-

pose that milk can gain access to the blood-current unchanged and without previous coagulation and digestion. In the first place, we cannot believe that milk in any form, or temperature, or in any manner of administration will fail to evoke an outpouring of gastric juice. The experiments of Beaumont showed that it invariably follows the ingestion of fluids, and even the gentlest titillation of the gastric mucous membrane led to its discharge. If this be true, coagulation of the milk in the stomach is certain, no matter when or how the milk be given. If, however, we grant the possibility of the milk running the gauntlet of gastric juice coagulation and a partial digestion, what assurance have we that it would fail to excite the pancreatic secretion, by which it would inevitably be coagulated and digested? It seems to me totally untenable to suppose that the milk can enter the absorbents directly and without change. While I gladly admit that the method of milk administration which Dr. Bulkley advocates seems to have the weight of clinical experience back of it and to be valuable, the theory as to its action seems to me out of accord with the present accepted beliefs of the best physiologists.

DR. BULKLEY, in closing, said he was glad of the criticisms which had been made, as he believed that only by frank and full discussion could truth be brought out. He had purposely presented the paper before the Section on Physiology because he wanted the theory proposed to be scientifically considered and criticised and he should endeavor to benefit by the remarks made, and should study the subject still further.

But he would say, that in spite of the objections that had been raised, he should still adhere to the theory as proposed until a better working hypothesis was obtained. Because, however the ultimate course of the milk may be considered physiologically, there was somehow a vast difference, greater than he could express by words, between the behavior of milk when taken in the ordinary way carelessly, or with food, and when administered absolutely according to the principles and methods laid down. This clinical difference, which he had

observed for many years—from ten to twenty—and in hundreds of instances, must have some scientific reason back of it; and, for his part, he would prefer to accept the accumulated evidence of years as demonstrating some physiologic difference, than accept the statements or arguments that had been brought forward to show that the theory was untenable. Possibly the physiology was wrong—for this is a somewhat changing science—and we cannot explain just how milk or indeed other ailments act under perfectly normal conditions; for it is to be remembered that experiments, on which physiology is based, always introduce an abnormal element themselves. He should, therefore, adhere to his theory as an excellent working basis, because it furnished the means of aiding in carrying out intelligently the system or plan described, which with him and others had yielded such exceptionally beneficial results.

4 EAST THIRTY-SEVENTH STREET.

ANÆMIA.

BY F. E. HALE, M. D.,
PROVIDENCE, R. I.

To understand the full meaning of the conditions portended by this much misused word, a word only less frequently misapplied than malaria, one must consider the blood of mammals and notably of man from a standpoint quite foreign to highly specialized physiology now the fashion. This is distinctly marked by the definition as given by the "Standard Dictionary," which limits anæmia to scarcity of the red blood bodies.

The blood in certain of the less specialized forms of animal life is distinguishably two fluids, a red or yellow air (oxygen) conveying fluid, and a corpuscular hence milky nutritive one. In the vertebrates these two fluids are intimately intermingled giving origin to the blood. We may therefore at once, without consideration, see that at least two sets of anæmias are possible, one producing a condition of bloodlessness in respect to the respiratory fluid, the other producing the same condition with respect to the nutritive one. These two conditions may also be described

as anæmias with respect to the red and white blood, anæmias which are characterized in one case by starvation, deficiency, disease of the red blood bodies, in the other by the starvation, deficiency, and disease of the white ones.

Much consideration seems to have been given to the determination of the fact of anæmia by blood counting at a number of hospitals during the closing decades of this century, but one cannot but feel that much of it has been perfunctory and unserious expenditure of time. In the first place there is no sense or reason in simply counting the red cells (so-called) in a given quantity of blood if the condition of those cells is not also a matter of inquiry. If the actual number of red cells (so-called) is increased but slightly beyond the average number in the human blood, and at the same time the diameter is much diminished, how has the blood gained thereby? The blood may be ill nourished or even actually starved. For this reason it is essential for our special purpose to consider what anæmia may be and is. By common usage anæmia is any condition in which the blood is so disarranged as to its nutrition that the normal numerical relation among the blood bodies both with respect to the given bulk unit of blood and the number of the several kinds present shows a relative deficiency. It is now very generally recognized that there are three primary forms of anæmia to be met with and mastered.

a. One in which the total number of blood bodies in a given quantum is diminished. The relations between the different sorts of blood bodies not being disturbed.

b. One in which the total number of red corpuscles (so-called) is diminished without any corresponding decrease in the colorless ones.

c. One in which the decrease in the so-called red blood bodies is accompanied by a real increase in the number of so-called colorless bodies.

Prima facie this classification seems tolerably sufficient both in accuracy and scope, but a little experience shows the expert that it is both crude and misleading. To begin with it is open to the objection previously raised that it takes no account

of the diameters of the individual blood bodies. It is a fact well within the experience of every one working attentively with the best to the modern tools that the blood bodies of the young [have a measurably larger diameter than those of the adult. This is notably the case in children less than ten years old, in whom the total number of relatively large cells is about 80 per cent. Yet every little while a child is met with in which the average size of the blood bodies is less than in a man of 80 years, which properly may be called a case of senile degeneration. I find the clinicians are inclined to class these children as neurasthenics. Personally I have no hesitation in saying that they are the exponents of the degrading effects of starvation. This condition may and does exist beside a perfectly normal blood count.

There is a family in this city, a family in which is found every luxury which wealth can purchase in which the clinicians had neurasthenia a condition in three generations, and I have a positive knowledge that in two boys and a girl the average size both of red and white blood bodies is so reduced that it is hard to believe the blood human.

This condition of the size of the corpuscles may also present another curious abnormality. In almost twenty years' experience I have seen perhaps a dozen instances, all in chlorotics, male as well as female, or in parturient women of this increase in size. Indeed I am inclined to regard this as the real underlay of genuine chlorosis. A number of times I have seen the curious error of judgment which mistook the size disproportion for an abridgment of the diameter of the red vice an enlargement of the white, which abridgment an accurate series of measures proved to be an incorrect assumption.

Another very important series of changes from the normal are those in which the color reactions undergo alterations. This series is as yet too little understood to be discussed in this sort of a way, still we are beginning to know something of the meaning of the facts we see.

There remains one more condition to be considered that of the so-called pernicious anæmia. Properly this is not an anæmia at all, but a disease of the blood as truly malignant as an epithelial cancer or leprosy, although of a very different kind.

Expressed in the shortest terms anæmia is a condition of specialized starvation, the starvation of the one vital tissue of the body, the tissue by which alone the functions of respiration and nutrition are and can be carried on. The primary question for the clinician then would seem to be how to meet it. To this the natural answer is give food. Yes, doubtless, but how?

Did anyone ever see an anæmic whose bodily functions were properly performed, whose digestion was good, whose whole body was not more or less a machine whose parts were working with sand in every bearing? How many times have I heard physicians prescribe "good, rich food" when to give it was to overpower a digestion already weakened to the point refusing further labor.

I remember once in my college days hearing a well known teacher of medicine direct that a patient should have beefsteak, and then hearing him express his regret that his patient was suffering from "hopeless indigestion," when every student in his clinic who had had any experience with the underfed was satisfied that this would be the result.

In plain words from the standpoint of the pathologist, the student of theoretical medicine and I cannot claim to be more, the actual need seems clear. To give the blood the two or three essential things without which it cannot functionate, salt, albumen, globulins, iron.

Globulins the body must make for itself, for as yet human art is powerless. But in peptonized milk and peptonized milk with eggs, specially with the egg yolks we have a means of reaching the most weakened of digestive organs, the most broken down of nervous systems. Salt is just as easily given, indeed must be used to make the other palatable. But the iron. *Quen sabe.*

This has been the crux of therapeutics since the day of Hippocrates,

may be since before there was a medical school at Memphis, and it is the crux to-day. On the one hand we have the iron albumen compounds commonly called albuminates, of which feralboid is the last candidate for popular approval, on the other Blaud's pill or the tincture of the iron chloride.

Which shall be used? Who shall decide? Surely the professional therapist and not I, but from my point of view I can see one startling truth that among the preparations of iron there is only one known to me perfectly soluble in the intestinal fluids, perfectly absorbed by the vessels of the intestine. The neutral albuminate. The so-called feralboid.

Clinically the youngest among the preparations, in fact not yet one hundred days in the hands of the practitioners, it has already shown a usefulness in the treatment of the anæmia of the very young, infants less than a year old, quite unshared by any other preparation known to the writer.

A CONTRIBUTION TO THE CRÉDÉ SILVER METHOD OF WOUND TREATMENT.

BY DR. PAUL MEYER,

Staff Physician, Marine Service.

(Abstracted from the *Deutsche Militärärztliche Zeitschrift*, xxviii year, No. 1, Berlin, January, 1900.

PRACTICAL experimentation with the Crédé Silver method has been made for about a year past at the Naval Hospital at Wilhelmshaven. I have employed the Citrate of Silver Crédé as a dusting powder; the *Argentum Solubile Crédé* in 0.5:200.0 solutions (7½ grains to 6½ ounces) with 2.0 (30 grains) of albumin for internal use; the Lactate of Silver Crédé in solutions of 1:2000 for irrigations; the *Unguentum Crédé*; Citrate of Silver suppositories, 2 per cent., and Silver Silk, Silver Catgut, and Silver Gauze.

In the absence of personal experience with the method, I at first followed Crédé's directions with exactitude. The usual preparatory methods with hot water and soap, shaving, green soap tincture, alcohol and benzine were employed. Wounds

were irrigated first with water, and then with the Lactate of Silver solution. The powdered Citrate was employed as a dry or moist dressing; the Citrate of Silver suppositories were used for the orifice of wounds; and for spreading inflammatory conditions or general infections the Silver Salve was employed by inunction, or, more rarely, Soluble Silver was administered internally.

The following operative procedures healed per primam: One radical hydrocele operation; one hydrocele puncture; seven removals of great toe nails for ingrowing toe nails; five phymosis operations; one paraphymosis operation; one removal of a hazelnut-sized pedunculated fibroma from the rectum with the thermocautery; one enucleation of a cherry-sized sebaceous cyst from the temple, one of an egg-sized cystic tumor from the capsule of the knee joint, one of an egg-sized fibro myoma of the thigh under the fascia lata, and one of a walnut-sized hard indurated lymphatic gland from the neck; one removal of a potato-sized pedunculated exostosis from the lower third of the femur, and one of a smaller exostosis from the left calcaneus; one exarticulation of the right little finger at the metacarpo-phalangeal joint; one amputation of the left ring-finger at its middle; one removal of a splinter of glass 6 cm. (2 inches) long, seated for eight years on the tibia; and one transplantation on an ulcerated surface the size of a hand on the right knee.

In the following cases an abundant serous secretion lengthened the time of healing: One removal of an egg-sized sarcomatous lymphatic tumor from the right side of the neck, with massive non-purulent secretion during the first two weeks, the tissues having been greatly damaged during the operation, and the sutures cutting their way out through the separated edges of the wound; one removal of a walnut-sized cystic goiter, with a similar result after four weeks; one exarticulation of the left index finger at the metacarpo-phalangeal joint, with a similar result after fourteen days, and an irritation eczema appeared in the neighborhood of the wound; one external urethrotomy, with urinary infiltra-

tion and cutting out of the perineal sutures, but with little irritation of the surrounding tissues and healthy granulations promising a good final cicatrization; one skin transplantation on an ulceration of the left leg half the size of one's hand, with adhesion of the transplanted skin, but abundant serous secretion and exuberant granulation of the surrounding areas.

Pronounced suppuration occurred in the following cases: One paraphimosis operation with suppuration extrusion of a gangrenous portion of mucous membrane at the site of constriction; one removal of a walnut-sized cystic goiter, where the ligatured stump suppurated for 20 days.

Most of the foregoing cases went on to undisturbed primary healing, though the wounds were in many cases in situations very liable to become contaminated. The absence of irritative effects was very noticeable, even in cases where the tissues were soaked with urine for weeks.

The following injuries healed per primam: One punctured wound of the back with a pocket knife through the clothes, and a similar one in a very dirty palm; one contused wound of a dirty index finger, one behind the ear from a blow with a beer bottle, another of two dirty fingers in a machine, and another of the head with splintering of the bone; one incised wound of the little finger made with a bread knife; one complicated fracture; one incised wound of the upper arm with division of three tendons.

Abundant serous secretion appeared in the following cases: One burn of the third degree of almost the whole hand, in which other treatment had to be employed on account of disintegration of the tissues; one contused wound of the index finger, with secretion for seventeen days; one punctured wound of the shoulder with much hemorrhage and nine days' serous secretion.

The following injuries suppurated: Punctured wound of the temple and injury to a vessel of the dura, with suppuration for several weeks after trepanning and extrusion of a necrotic portion of the external table; one incised wound of the lower arm

in an attempt at suicide, with division and necrosis of two tendons; one contused wound of the index finger, with gangrene; one contused wound of the middle finger, with the same result; one complicated dislocation of the left distal thumb joint, with infection.

In most of these wounds the silver disinfection was satisfactory; the inflammatory symptoms retrogressed and became localized. In nine panaritiums suppuration ceased with the extrusion of the necrotic bone two to thirteen days after the incision. The granulations were good and functions were retained.

In five cases of suppurating lymphatic glands of the neck, the axilla and the groin, healing per primam took place twice; in the other three cases the separation of necrotic gland tissue caused suppurations lasting from four to fourteen days.

Twenty cases of cellulitis, mostly beginning in the hand, were incised and the lesion remained localized under the silver treatment. The same is true of nine cases of furuncle.

In one case of chronic leg ulcer the serous secretion interfered with the healing; another one was cured in seven days under the treatment, after having been handled by other methods for four weeks without result.

In two cases of tubercular disease of the lumbar vertebræ and ribs the silver treatment did no good. Both did better under iodoform.

As regards general infection, only one pronounced case of septicæmic nature was treated. The patient was an officer, forty years old, corpulent, with a fattily degenerated heart, and was admitted at 11 A. M. in a stuporous condition and with high fever. Infection had taken place from a small wound of the finger, and the whole forearm was swollen and doughy. The flexor muscles of the forearm was incised under Schleich's anæsthesia; no pus was found, but the muscle bundles were soft and discolored. At half past eleven of that morning an injection of 4 grams (1 drachm) of the Silver Salve was administered; crisis occurred with sweating between 5 and 6 P. M.; the temperature fell from 39.2° C. (102.6° F.) to 38.7° C. (101.7° F.), and at 10

P. M. it was 38.0° C. (100.4° F.). The dyspnoea got better, the heart stronger, the sensorium cleared, the general condition became satisfactory, and the outlook very hopeful. At 11 o'clock the patient asked for water; after he had drank it he fell back dead of cardiac paralysis. In this case there was an energetic reaction to the silver, and I am convinced that with a more resistant heart the outcome would have been a happier one.

A second case of a wound of the foot with beginning general infection in a strong young man reacted very plainly to a silver inunction, as was shown by retrogression of the fever and a very noticeable improvement in his subjective condition.

In the various cellulites the temperatures fell after the inunctions; but the inflammation did not extend further than the nearest lymphatic vessels and glands, the subjective condition was unaffected, and general infections could hardly be present. The course of the affections was the same as after the usual incisions and antiseptics.

The conclusions to be drawn from the above cases may be stated as follows:

Of course the wounds under the silver treatment is in general similar to that under the usual aseptic and antiseptic procedures. But it possesses two important advantages. *Rapid and reliable healing can be obtained without asepticism and with less rigorous antiseptic measures, and thus with simpler means and less trouble.* Hence it is especially suitable for the sick bays of ships, for use in the field, and for hospitals where the facilities for aseptic wound treatment are deficient and suppurative affections and fresh wounds have to be handled in the same room or very hurriedly, or with inexperienced assistants. As far as my material permits me to judge, I have found Credé's statements to be correct; I consider his method an efficacious and handy one.

The second advantage is *the marked tendency of the method to effect the localization of inflammatory processes*, as Credé claims. In most cases the inflammation of the tissues surrounding the lesion subsided in the shortest time. And even when it pro-

gressed along the lymphatics a general infection was prevented.

Poisoning by the metal, or any special pain from its use was not noticed; eczemas did occur. The course of healing was not noticeably shortened; and primary union took about the same time as with aseptic treatment. Necrotic tissue when present was cast off with a non-irritating supuration before actual union began. The cases of general infection and of burns were too few to permit of a definite judgment; but a favorable reaction of the system to the inunctions was readily recognizable. Granulations under the citrate were almost always remarkable for their vivid color and vigorous growth.

The abundant serous secretion from the tissues was apparently a disadvantage in the cases where a primary union was desired; but whether this was dependent upon the citrate itself or upon other circumstances I cannot decide.

The cost of the silver treatment I did not find to exceed that of other methods. The Citrate of Silver is dearer than iodoform; but it is used in very much smaller quantity, as a very thinly dusted-on covering. The Silver Gauze is too expensive for universal use; but I believe that common gauze with the citrate will do just as well. The price of the ointment is of no importance, on account of the small quantities that are employed.

The following is the method that I now employ for ambulant patients, in view of the very reliable anti-inflammatory and localizing properties of the Credé Silver preparations:

Injuries and inflammatory processes are treated with silver until all traces of inflammation have disappeared, and until healing by adhesion and granulation formation has begun in the depths of the wound. Cicatrization may be promoted by canterizations and salves. Operative wounds in which primary union is not absolutely necessary are treated with silver if it does not appear that the abundant serous secretion interferes with the healing. For febrile symptoms I employ the salve by inunction; more rarely I administer the silver internally.

In conclusion I may state that the silver treatment, whilst not equal to

the aseptic treatment of wounds, is reliable where the latter cannot be carried out; as in non-aseptic hospital operating rooms, in dressing rooms, in ship bays, in private practice, and especially in the field. In the latter case the removal of the first dressing need not be a matter of such anxiety as it now is, even if it is soaked with secretion from the wound. For it is proven that the bacteria cannot develop in secretion impregnated with silver.

My experience leads me to place the fullest reliance upon the silver treatment of wounds, and I can recommend it in every respect in the most emphatic manner.

HOW I QUICKLY CURED A COLD IN THE HEAD.

BY WILLIAM H. MURRAY, M. D.,
DANBURY, CONN.

THE winter just passed in the New England States has been one of unusual severity. Starting in with a severe snow storm just before Thanksgiving, we have had a succession of snows, rainy days, cloudy weather, and altogether a disagreeable time.

To cap the climax the grip has been unusually prevalent, leaving in its train all of that long list of sequelæ which appall the doctor and discourage the patient.

I had an attack of influenza about Christmas time, which though severe, I recovered from with but little after-effects save a hypersensitiveness of the mucous membrane of the nose. As soon as I was nicely rid of one cold in the head, another came until I was about discouraged. All kinds of treatment were adopted, a new one for each attack, which did not seem to do much good, the attack lasting about a week.

It seemed after an attack was over that some of the germs causing it, would retreat to breed in some of the recesses of the nose, only to come forth again on the least provocation or undue exposure to cold or dampness. It was about six weeks ago, I was taken with one of the worst attacks, sneezing almost incessantly, chills and fever to start with, coryza which kept me from getting about,

and my wash-woman working overtime to keep me in handkerchiefs.

This condition had lasted nearly two days, confined in-doors, a semi-invalid, afraid that the trouble would extend to my lungs and pneumonia supervene. At this time I made up my mind to give lyptol a thorough trial as a local application and as a germ killer.

It is just possible that you do not know what lyptol is, so I will state that it is an antiseptic ointment for surgical uses. The base is a thoroughly sterilized petroleum to which is added under high temperature bichloride of mercury; the Australian oil of eucalyptus, formalin and benzo-boracic acid. I had used it quite a good deal as a surgical dressing, and as a germ killer, pus destroyer, antiseptic and healer, I found it unequaled.

Relying on this experience I commenced making local application to the inside of each nostril about 2 P. M. using the little finger and pushing the ointment as far up as possible. Inside of an hour I found that I was not sneezing so much and the irritation was considerably relieved. I continued the applications until bedtime when I gave each nostril an extra big dose. When I awoke in the morning, I found to my amazement, that the cold was all gone; not a vestige left; nor has there been a single evidence of its return since.

I have used it in eleven cases since this, in cases from youth to old age and every time, in a few hours the deed was done; the germs killed; the patient cured. It must be used freely and fearlessly and the results will be right.

SCARLET ANGINA.—

R Aq. oxygen, 30.
Sodii bicarb., 12.
Aq. dest. coct., 60.

Sig. Irrigate the pharynx every two hours.—*Clanahan, Journal de Médecine de Paris.*

FEVER BLISTERS.—

R Camphor, gr. v.
Arrowroot, powd.,
Bismuth subnitrate, aa gr. xxx.
Cold cream, 3 iv.

Louisville Med. Monthly.

ON PHYSICAL EDUCATION.

BY C. P. ROBBINS, M. D.,
WINONA, MINN.

ARTICLE V. "REST."

IS a man very wrong for being after all only a man? Which is the most reasonable and does his duty best; he who stands aloof from the struggle of life, calmly contemplating it, or he who descends to the ground and takes his part in the contest?

The most valuable thing in life is work and the essential element necessary for proper and successful work is rest.

The earth, where our feet are, is the work of the same Power as the immeasurable blue yonder, in which the future lies into which we would peer. Who ordered toil as the condition of life, ordered weariness, ordered sickness, ordered poverty, failure, success—to this man a foremost place, to the other a nameless struggle with the crowd—to that a shameful fall, or paralyzed limb, or sudden accident—to each some work upon the ground he stands on, until he is laid beneath it.

When the Almighty ordained that man should live by "the sweat of his brow" he also gave him after fatigue or temporary exhaustion, the blessing of rest and repose. What should have been the condition had it pleased the Creator to withhold the greatest solace in life. But in the plentitude of His unspeakable benevolence he gave man, as well as all living nature, rest when most needed.

"All birds and beasts lie hushed; sleep steals away
The wild desires of men and toils of day,
And brings, descending through the silent air,
A sweet forgetfulness of human care."

The epitome of all nature is work from the beginning of life to its end, but the corollary in every instance is rest. Growth is the antitype of repair. Repair is but the repetition of growth. Rest and repair stand in the same relation as cause and effect.

As we look around we not alone see these relations, but the co-existence to growth as well. In fact growth precedes physiological rest.

All living nature has its periods of rest. The vegetable kingdom requires rest, marked in some places by the cold of winter, while in others by

the hot scorching sun of summer. The Alpine plants thrive luxuriantly after being buried beneath snow and ice several months out of the year, which when transplanted to mild and varying winters cannot be cultivated. The lily of the Nile proliferates in great profusion after lying dormant during the dry season. In fact plants during growth have short periods of rest; some by closing their leaves at night, others by closing their flowers at particular times during the day. All animals require their rest. Following injury, they endeavor to escape the prying curiosity of man. The stock-keeper and grazier pen up their cattle during the period of fattening, in order to harbor that most highly organized animal tissue for food. Nature devotes her best efforts during the periods of rest, to repair the parts which have endured exhaustion, to revivify growth in plants and to renew bodily strength in animals and restore mental vigor and strengthen nerve force in man.

Thus man may be able to resume labor in all the delightful vigor of a new existence. So in all living nature, rest is essential to life. And now as regards rest to man. The methods which nature adapts to the same end in individual organs. All viscera require the alternate condition of work and rest to keep them in a healthy state. The heart during contraction and dilation out of every second of time rests 4-10 of a second or in each day rests about 9½ hours. But let emotional influences or excessive athletic exercise deprive it of its appropriate rest and functional derangement, followed by structural change occur. The liver, with its elastic peritoneum, its thin but elastic capsule, its structure around Glisson's capsule surrounding the portal veins and the contractile power of the blood vessels bring it back to maintain its condition of rest, and allow the secreting parts to recover strength and tone. But let excessive potations, by over-indulgence in food or irregularity of diet occur, the physiological harmony is lost, and the organ glides into disorganization. The kidney possesses an elastic capsule for the same purpose and is also subjected to pressure by the superimposed colon which increases phy-

siological rest. Also they act alternately, one kidney is always at rest. But let the function be disturbed by alcoholic drinks, which encourages and maintains excessive action, and the same structural deterioration takes place from the loss of rest. The spleen with its elastic capsule and elastic partitions give it its desired rest when needed.

The lungs with their elastic tissue and muscular force without, return them to a state of rest, after full inspiration. The brain during work becomes hyperæmic and the fluid around the brain passes down into the ventral canal. But as rest ensues the hyperæmia subsides and coincidentally the cerebro-spinal fluid rises, thus inducing a state of rest. The cerebro-spinal fluid being of the same use to the brain as the elastic capsule or elastic tissue to the organs already mentioned.

The digestive apparatus has its periods of rest and so every other organ and tissue in the body likewise. But let them be over-taxed and physiological harmony is lost, the result bringing disturbed function and finally structural change.

All periods of life require rest; some more than others. Whenever a man has reached two score and ten and, in railway parlance, is started on the down grade, he should study to simplify his life so as never to be required to draw upon his reserves, nor work under pressure, or with a conscious over-draft of nervous force. A neglect of this precaution is pretty certain to interfere with both the quantity and quality of our sleep, and sooner or later to compel a resort to stimulants of one kind or another, by which we borrow for the day the strength of to-morrow, thus speedily to become hopelessly indebted to nature, the most inexorable of creditors.

All work and no rest takes the spring and bound out of the most vigorous life. Time spent in judicious resting is not time wasted, but time gained. Rest is the sweet sauce of labor.

"Rest for the tolling hand, rest for the thought-worn brow,
Rest for the weary, way-sore feet, rest from all labor now."

During the period of infancy the child who sleeps most, thrives best.

All will admit that in infancy development is in its highest state of activity and that the healthy infant passes the greatest part of its life in sleep.

Growth, the renewal of some parts and the fresh development of others, claim sleep and rest as helpmates. Rest during childhood becomes a more serious problem, for it is not so much the question of sleep, as the change of duty to require rest. The school restrictions and necessary confinement, essential no doubt, but rendering more imperative out of door amusements which is rest to those organs most needed from the confining life.

The important factor is how to improve nerve force by establishing rest by some diversion, because, "Absence of occupation is not rest, a mind quite vacant is a mind distressed." In manhood and womanhood the question of rest in its broader sense does not mean restriction to absolute quietude, but means toward an end to derive a physiological rest. Rest is absolutely necessary for all, and the questions arise how, where and when shall we rest?

As to how:

1. Rest does not mean absolute inaction, but a change to mental occupation, if muscular work has been indulged in and, *vice versa*, if mental work has been indulged in. The sedentary rest by playing to good advantage, the active (muscular exercise engaged in) by constant literary work.

2. We should endeavor to sleep eight hours out of the twenty-four under the most favorable conditions. Some natures demand more sleep, while others require less, but the average require eight hours out of the twenty-four.

As to where:

1. In a comfortable bed, on a firm hair mattress and pillows, or cotton mattress and pillows, as both answer the same hygienic purpose; there being difference only in quality.

2. Among our books three hours a day, if our work is muscular or an out of door active life if mental, the same amount of time. Such as in our library with the former, or by strolling in park or field, or riding as the best promotion of visceral dormancy is the back of a horse.

3. To some complete change of locality, to others a change of climate to still others of environment. The sea voyage for worn out nerves, the bright skies of a summer climate for the feeble and weak. The hunting and fishing ground for the restless, and for the monotonous life, the sea-side resort. In fact the one most healthy in mind and body is the one most contented. Avarice, ambition, anxiety, the trinity of nervous prostration, we must lay aside, descend the mountain into the peaceful valley and commune with nature.

As to when:

1. As nearly as possible one day in seven.
2. An annual vacation.
3. After excessive mental or physical exercise.

But always remember that too much work means waste, wreck; and too much rest means rust, death.

The happiest end of life is this—when the mind and the other senses being unimpaired, the same nature which put it together takes asunder her own work. As in the case of a ship or a house, he who built them takes them down most easily; so the same nature which has compacted man, most easily breaks him up.

"When sets the weary sun and the long day is done,
And starry orbs their solemn vigils keep,
When bent with toil and care, we breathe our evening prayer,
God gently giveth his beloved sleep."

—:O:—

VASOGEN: A NEW SOLVENT.—Vasogen is a vehicle which possesses the property of penetrating the pores of the skin more quickly than any other substance. It is an admirable solvent, holding in clear solution Iodine, Iodoform, Creosote, Guaiacol, etc., and remedies dissolved in it are quickly absorbed. Chemically, Vasogen is an oxygenated hydrocarbon, *i. e.*, a partly oxydized hydrocarbon, and has the power of rendering drugs which are incorporated with it soluble in water or emulsifiable with it. Employed externally, it forms emulsions with the secretions of the body, and thus becomes rapidly absorbed. This fact has been proved beyond question by the presence of the drug in the urine after inunction with iodine, iodoform, creosote and mercury Vasogen. Iodine, creosote, etc., when

dissolved in Vasogen, do not irritate the skin or mucous membranes, and can be used extensively both internally and externally.

For external use, liquid Vasogen preparations are poured into wounds or are applied to them on cotton or lint; they are also painted upon the intact skin or rubbed into it with the hand. Internally the Vasogens are taken in gelatin capsules or mixed with milk, coffee, tea, wine or cognac. The following remedies in combination with Vasogen are largely used: Iodoform, Iodine, Creosote, Menthol, Beta - Naphthol, Camphor - Chloroform, Ichthyol, Guaiacol, Sulphur and Tar. These preparations are made by dissolving the various medicaments in the liquid Vasogen during its progress of manufacture. Mercury Vasogen ointment (33⅓ per cent, and 50 per cent.) is a special preparation with inspissated Vasogen. It may be obtained in handy capsules containing 3 and 4 grammes each, can be rubbed into the skin much quicker and more thoroughly than the official blue ointment, is far more pleasant to use, and costs no more.—*Pharmaceutical Era*, April 20, '99.

RHEUMATISMAL AFFECTIONS.—Lancereaux and Paulesco, cited in the *New York Medical Journal* of February 25, 1899, iodothyrene the subject of a careful investigation in a class of cases in which it has previously not been employed. The authors deal more particularly with the effects of the remedy in such so-called "rheumatismal" affections as chronic rheumatism, gout, arteriosclerosis, vasomotor and trophic disturbances of the extremities, and scleroderma. They give the history of a case of generalized scleroderma in a young woman. She was much improved after four month's use of the remedy, which was to be continued. The next case was that of a woman with "herpetism" and vasomotor disturbances of the limbs. The slightest exposure to cold caused blanching of the fingers and toes. Under the influence of iodothyrene this trouble was much improved, and the profuse sweats and salivation with which the patient was also affected, subsided entirely. The third and fourth cases

were those of men with "herpetism," chronic rheumatism and gout, generalized arteriosclerosis, hypertrophy of the heart, and renal sclerosis. Both were benefited in many respects by the treatment.

A NEW OPERATION FOR HERNIA.*

Having had three patients with whom complete atrophy of the testicle followed the Bassini operation for inguinal hernia, and some recurrences when the Czerny and Macewan methods were adopted, I, some three years ago decided to try a plan which I felt certain would prove successful, since by it total obliteration of the inguinal canal would be obtained. Experimentally the chief objection to the plan has been the reluctance of patients to accept the proposed procedure; so that thus far I have succeeded in securing but three cases. These have, thus far, been entirely satisfactory in their history subsequent to the operation.

The method is as follows: A large flap is turned back, exposing the hernial sac and the inguinal canal in their entirety. The sac is then carefully dissected out, opened and contents reduced. At this stage the opening into the abdomen is closed with gauze and the spermatic cord and testicle lifted out of their natural position and enveloped in iodoform gauze. From the hernial sac (parietal peritoneum) there is now made a pouch, or artificial tunica vaginalis testis, into which the testicle and cord are passed and enclosed with catgut sutures in such a way that not too much pressure is possible upon the cord; the whole pushed into the abdominal cavity, and anchored by a few catgut sutures. The cut in the peritoneum is next closed; next the opening into the scrotum sutured; then each muscular layer of the abdominal wall carefully sutured, completely obliterating the canal—just as is done in operating for inguinal hernia in the female.

That the ultimate fate of the buried testicle is atrophy I cannot dispute, as no opportunity has yet presented for post-mortem examination;

* Read before the Academy of Medical and Surgical Sciences.

that it is possible I cannot deny. From a surgical standpoint the chief objection to this operation is that a suppurative orchitis or epididymitis might necessitate abdominal section; but suppurative inflammation of these structures is so comparatively rare that this danger can scarcely outweigh the advantages to be gained. Thus far only the most gratifying results have been noted.—Emory Lanphear, M. D., Ph. D., St. Louis, Mo.; Fellow of the St. Louis Academy of Medical and Surgical Sciences.

THE CAUSATION AND TREATMENT OF CONSUMPTION.—I have little faith in specifics in the treatment of tuberculosis. I believe it is entirely a disease of malnutrition, as a result of defective elimination, and all therapeutic measures must be directed towards the improvement of the digestion and assimilation. Consequently I am explicit in my instructions as to diet, forbidding absolutely the use of alcohol, syrups, potatoes in any form, pork, veal, and all such dishes as are difficult of digestion and prone to fermentation. In many of these cases of alimentation I have found it beneficial to give some good diastasic extract of malt, that known as maltine proving most satisfactory for the reason that it is the only malt extract known to me which gives generous proportions of nitrogenous and phosphatic matter, with a proper proportion of carbohydrates, being made, as it is, from wheat and oats, in conjunction with barley, instead of barley alone. Tonics, stimulating the nervous system and digestive organs and assisting in the reconstruction of blood and tissue are important. Stimulating baths may be used with good results. It is, in my opinion, a mistake to overwhelm the body with frequent injections of undetermined animal serum thereby producing either a severe reaction or possible accumulative toxemia.—John R. Kestell, Ph. C., M. D., Detroit, Mich. Read before the Wayne County Medical Society.

OPACITY OF THE CORNEA.—

R. Ol. terebinth, 3 j.

Ol. amygd., 3 ij.

M. Sig. Eyedrops.—Berry, Ex.

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John J. Berry, M. D.,
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Editorials.

**PHYSIOLOGICAL EFFECTS OF
EXERCISE.**

THE recent observations of Dr. Williams regarding the effects of muscular exercise upon the heart and other organs is quite in accordance with the data furnished by previous investigators. The facts in question were obtained from an examination of the participants in a long distance running race held last month in Massachusetts. The results as recorded in the lay press are as follows:

The men who entered the race were vigorous, healthy, normal young men; average age 22 years; at the finish all were in a more or less exhausted condition; there was a loss of weight varying in individuals from 6½ pounds (maximum) to 1¼ pounds (minimum); there was a loss of temperature varying from 5.4° F. (maximum), to 0.5° F. (minimum).

By far the most interesting result of these studies was the demonstration that every form of exercise and every individual participating should receive separate consideration as to the effect of this violent and prolonged muscular exercise upon the heart. These latter studies justified the following conclusions: That before the race the hearts of all the men who finished were in a condition of relative healthy enlargement (physiological hypertrophy); that the only heart examined beforehand which was of reduced or normal size was that of a man who dropped out on the way; that the effect produced upon the hearts of those who finished

was simply a participation of its muscular structure in the general muscular exhaustion which resulted from the effort. The chief signs of this muscular exhaustion of the heart subsided before the men left the examining room.

The conclusions to be drawn from this report are, that while the injurious effects of such exercise in the case of picked and healthy men may not be apparent, there is at least a temporary cardiac hypertrophy as well as a considerable strain on the blood vessels and excretory organs. Even admitting that all this is strictly physiological, it is not the less true that frequent exercise of this kind will produce a condition of muscular hypertrophy, which, as in other conditions, is prone to result in secondary degeneration. We believe that habitual muscular exercise of a violent character is decidedly inimical to health, and that any form of muscular development which greatly exceeds the demands of daily life is an element of danger to the individual. Health and longevity are not promoted by this condition, but rather by a proper activity and due equilibrium of the various organs and tissues of the body. Bodily endurance rather than phenomenal strength is the object to be attained.

**IS MIGRAINE A SOMETIME
SYMPTOM OF URÆMIA?**

THE laboratory and clinical work of the past few years has done much to clear up disputed points in the etiology of disease. The effects of impaired hepatic and urinary secretions have latterly been commented upon very generally. The action however of urea or its products upon the nervous system has not received all the consideration that it deserves. Hence the recent communication from Dr. W. H. Birchmore, containing laboratory notes bearing upon this subject, will be read with interest. They read as follows:

1. P. D., aged 22. Athletic young man, given to the bicycle and the like. Normally his urine contains 42 grams of urea in the 24 hours. Migraine lasted 18 hours. Urea excreted during migraine 15.4 grams. Urea excreted in the following 24 hours 72.1 grams.

2. Mrs. W., aged 40, blond, slight. Normal urea excretion is 31.3 grams. Migraine for 8 hours. Urea during migraine 4.42, in following 24 hours 42.7 grams.

3. V. D., aged 25. Normal urea excretion 38.5 grams. Migraine for 18 hours. Urea excreted 10.2 grams. In following 24 hours 55 grams with some urine lost.

4. Mr. R., aged 53. Powerful man, blond. Normal urea excretion 53 grams. Migraine for 12 hours. Urea excreted 10.2 grams. In following 24 hours 81.3 grams.

5. Mrs. W. Particularly bad attack lasting 30 hours. Total excretion during attack 8.21 grams. In first 24 hours after attack 80 grams were excreted, second 24 hours 55 grams, beside some loss. I am informed that fever and some delirium accompanied this last attack. Personally I know nothing of the treatment, but the urine showed that phenacetine had been used.

In these few cases there will be noted an intimate relationship between the attacks of headache and the suppression of urea. To what extent this would hold true in a longer series it is impossible to state as data are lacking. Yet we have reason to believe that in a very large proportion the same conditions prevail.

In asthma, as well, the same rate has been found to hold true, and very remarkable results have been attained by the administration of urea solvents.

In these two the etiological factors are similar or identical so far as this product is concerned, though the exact way in which urea or its toxine exerts its influence upon the nervous system is by no means demonstrated. Nevertheless, the treatment of these conditions is not in-

fluenced thereby, and we continue to use the compounds of lithia, potash, soda and salicylates with considerable success. While in lithæmic forms of migraine and asthma there are many symptomatic remedies, none can be permanently effective which fail to eliminate the products of impaired digestion and tissue metamorphosis.

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After Office Hours.

VI

IT WAS long after office hours when the doctor dismissed the inevitable young man who had been reading up his own case in the "Household Physician," and whose song had been like unto the wail of a lost soul. But his doubts had now been half dispelled by Budweiser's suggestive therapeutics, and the latter felt assured that hypnotism and the bromides would finally do the rest.

"It is unfortunate," said he, in reply to a remark of mine, "that education even now-a-days has so little practical value. I was reading last night one of Froude's addresses in which he says, speaking of intellectual acquirements:

'The knowledge that a man can use is the only real knowledge: the only knowledge that has life and growth in it and converts itself into practical power. The rest hangs like dust about the brain, or dries like rain-drops on the stones.'

Now just note what the doctor is obliged to undergo during his toilsome march upward. He must burn the midnight oil in committing to memory a thousand and one dry, disconnected facts upon which he is eventually to pass a rigid examination and by which his ability as a future practitioner is duly gauged. Most of us know, however, that a large proportion of those important things are of no earthly use to any-

body, and have nothing at all to do with one's future success. The wise man, therefore proceeds to forget them immediately and sets himself to work acquiring something useful in their place. Otherwise he is bound to be superceded by the uneducated, who happen to know how.

But as I was saying; after getting our Latin certificates—it always makes me smile to see diplomas awarded any way—and after joining the noble army of martyrs, we have served up to us a heterogeneous mass of books, journals and essays, all of which we are compelled to read in order to 'keep up,' but which contain many painfully scientific articles by medical enthusiasts or a narrative of the personal achievements of specialists who are advertising their wares, or the histories of cases which are too unique to be true. We won't say anything about the endless and heavy packages of circulars which describe so vividly the healing power of special drugs and which the drummer entreats us to read with the eye of faith. Yes, our cross is heavy, but our craft holds the belt for Christian resignation under the trying ordeal."

"Then you place little reliance in the recent therapeutic discoveries," I remarked.

"I have faith in only what has stood the tests of time and experience. Every few years there will be a true and valuable discovery but in the intervals we have a mass of stuff which is a grievous imposition upon a doctor's time and strength and patience. Individual inspirations as noted in our current literature, are notoriously unreliable and seldom stand investigation. There is very little which can be called new for our advances are on lines laid down years ago by the fathers of medicine. You remember, of course, what Emerson said:—'Every ship that comes to America got its chart from Columbus. Every novel is a debtor to Homer. Every carpenter who

shaves with a fore plane borrows the genius from a forgotten inventor.' Every one who achieves prominence is expected to contribute either a new fact or a book; so as he can't do the first, he tries to do the other thing, which is much the easier task of the two, for the text-book of to-day is apt to be little more than one of the old classics revised and brought down to date by the ambitious author."

"But some of the most important things are yet to be written," said I.

"There, now you have hit it! The books seldom tell us what we most desire to know. The usual conditions of health and disease every well educated man is more or less familiar with. We don't need any help so far as *they* are concerned. It is the strange—the unique—the enigmatical, which bothers us. Now, to whom shall we go for more light or something definite? Not to the books, for they tell us nothing and not to the teachers, for their utterances are more obscure than those of the Delphic oracles. No, the seeker after truth must generally be content with the data which his past experience affords and cease to look to others for a solution of his doubts and perplexities.

Don't you have every once in a while a case the like of which you never saw before? And don't you turn over all the old trash in your library and search wildly through all the text-books from Watson to Osler and do you ever find what you want? I guess not! And then you sit down and swear, and forthwith your thoughts wander back to the days when you valued your new diploma above gold and precious stones—when you knew it all and had no occasion to ask questions of anybody."

"I was going to write a paper for the next medical meeting on 'What the books don't tell us,' but two or three young doctors have since located in our block, so that the intel-

lectual deficiencies of us veterans have now been fully supplied."

And even as the doctor spoke there entered one of the peripatetic medicine men who arranged artistically on his study table a row of sample bottles with accompanying therapeutic notes. After adding as peace offerings a paper-weight, a blotter and a calendar, he made a memorandum in his note-book and seemed desirous of saying something, but Budweiser kept right on talking in his animated way and the visitor, after waiting in vain for an opening, finally gave it up in despair and retreated in good order.

"Did you ever reflect," asked the doctor, noting with a smile of satisfaction the effect of the remark with which he speeded the parting guest, "upon the number of people who steal a large per cent. of the doctor's working hours and pay him less than nothing for his time? These individuals either have something to sell or else they feel called upon to confide in you the history of their physical infirmities or the details of their personal affairs. Then, as a last straw, there will appear at your busiest moment, the patient who doesn't know when to go, but sits and sits, expecting you to entertain him and exhibiting a calm indifference to other people's feelings and the claims of those who are sitting on the anxious seat in your waiting-room.

What might not the physician accomplish with plenty of time at his disposal and an assurance of uninterrupted labor in some special branch of science or study?"

"Yes, and what an enormous income for the one who could make them pay for the services rendered," I added.

"But that is beyond human conception," replied he. The gratitude of the ordinary patient is something of an unknown quantity, to say nothing of the depravity of the other

half. One of the early fathers once said that patients with severe diseases are more grateful for a partial than for a complete cure. He might also have said that the most brilliant and careful work on the part of the doctor is rarely known and if, perchance, recognized, is seldom appreciated. The memory of the patient is palpably short and erratic and all of us can think of experiences in medical and surgical therapeutics, which have brought us nothing but the satisfaction of effort scientifically conceived and successfully carried out. Why, I treated a clergyman once——"

"She's having terrible pains, doctor," announced the breathless messenger, "and the nurse says——"

"All right!" replied the doctor, and thrusting into his coat pocket a reprint on "The Effect of Astigmatism upon Uterine Displacements," he grasped his obstetric bag and sallied forth to possible trials and future conquests.

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Current Literature.

"Hernia," by W. B. De Garmo, M. D. Reprinted from *International Clinics*.

"Prostatectomy," by Parker Syms, M. D. Reprinted from *Annals of Surgery*.

"Public Health Reports, Treasury Department, United States Marine-Hospital Service."

"Cyclopathy," by William Edgar Darnall, A. B., M. D. Reprinted from *Medical Brief*.

"Diphtheria," by W. D. Travis, A. B., M. D. Reprinted from *The Alabama Medical and Surgical Age*.

"The Practical Application of Physiologic Principles in Infant Dietary," by David E. Bowman, M. D. Reprinted from *American Medical Compend*.

"Corpulence and the Fatty Heart," by Thomas E. Satterthwaite, M. D. Reprinted from *The Post-Graduate*.

"The Progress of Rhino-Laryngology," by W. Scheppegegrell, A. M., M. D. Reprinted from *Laryngoscope*.

"Pericardial Diseases, Illustrated Clinically," by Thomas E. Satterthwaite, M. D. Reprinted from *Medical Monthly*.

"Typhoid Perforation. Operation—Recovery," by Hugh M. Taylor, M. D. Reprinted from *Virginia Medical Semi-Monthly*.

"Diagnosis of Bullet Wounds of the Abdomen," by Hugh M. Taylor, M. D. Reprinted from the *Virginia Medical Semi-Monthly*.

"Delay as a Factor in Unsuccessful Surgery," by Hugh M. Taylor, M. D. Reprinted from *Georgia Journal of Medicine and Surgery*.

"Perforating Ulcer of Duodenum. Operation—Recovery," by Hugh M. Taylor, M. D. Reprinted from *Virginia Medical Semi-Monthly*.

"The Etiology of Seasickness," by Wm. Edgar Darnall, A. B., M. D. Reprinted from the *Journal of the American Medical Association*.

"The Abuse of Water in Surgery," by Edwin Walker, M. D., Ph. D. Reprinted from *The Journal of the American Medical Association*.

"Reflex Irritation as a Cause of Disease," by Edwin Walker, M. D. Reprinted from *The Journal of the American Medical Association*.

"Report of a Case of Poisoning by Roaches, with Symptomatology," by J. Murray Johnson, M. D. Reprinted from *The Philadelphia Medical Journal*.

The German appreciation of Kipling, which *The Living Age* has translated from the *Englische Studien*, is keen, just and discriminating. Kipling is widely read, and to judge from this estimate, is well understood in Germany.

"The Climate of Atlantic City and Its Usefulness in Disease," by William Edgar Darnall, A. B., M. D. Reprinted from *The Therapeutic Gazette*.

"The Question of Inflating the Bladder with Air Preliminary to the Bottini Operation," by Bransford Lewis, M. D. Reprinted from the *Medical Record*.

"The Dry Method in Intrauterine Surgery," by Edwin Walker, M. D. Reprinted from the *Transactions of the Southern Surgical and Gynecological Association*.

People who find a good deal of current fiction somewhat too gruesome and gory will appreciate Mr. Robertson's essay on The Murder Novel, which forms the leading article in *The Living Age* for April 29.

Henri Lavedan's story of A French Courtship, which *The Living Age* translates from the French and publishes as a two-part novelette in its numbers for April 22 and 29, has a very delightful humor and naiveté.

The authorship of the Etchingham Letters, which have been running anonymously as a serial in *The Living Age* since the first of January, is now disclosed. The letters are the joint work of Mrs. Fuller Maitland and Sir Frederick Pollock, a combination which goes far to account for their range of cleverness. The publication in *The Living Age* is by a special arrangement with the authors. The Letters will soon be published in book form.

LIPPINCOTT'S MAGAZINE FOR MAY, 1899.—"Princess Nadine," by Christian Reid, the complete novel in the May issue of *Lippincott's*, appeals strongly to all readers who revel in a good, stimulating love-story.

The number contains also a scholarly paper, "the Question of the Phillipines Reviewed," by John Foster Kirk, author of "Charles the Bold;" a character sketch of "Phillippe de Comines," by Emily Stone Whiteley; "The American Fondness for Movements," by Edward Leigh Fell; Glasses and their Uses," by John S.

Stewart; "Democracy and Suffrage," by M. L. G., and a paper directed at the "irresponsible reviewer" by one who makes an unanswerable response from the original resources concerning the legitimacy of a daughter of Benjamin Franklin.

Of shorter fiction there is a remarkably strong story by Adeline Knapp, entitled "His Lack of Courage," a timely tale of Memorial Day, "Kate," by George William, and a bright little society sketch, "Jaquemynots," by Edgar Maurice Smith.

The poetry of the month is contributed by Paul Laurence Dunbar, Clarence Urmy, Wilbur Larremore, and Edward Wilbur Mason.

There has been so much reference in the recent cable news from Europe to the strong feeling in France against England, and so much significant allusion to the experiments which the French are making with submarine boats, that the question of the possibility of a French military force ever crossing the English Channel becoming interested, a writer in the April *Cosmopolitan*, "Quatre Etoiles"—evidently a *nom de plume*—tells an ingenious story of the results of the consummation one hundred years later of that plan which was first conceived by Napoleon when he brought his army to the plains of Boulogne in 1804. When every detail of the plan has been successfully prepared, a great *fête* on the cliffs of Boulogne brings the Channel Squadron and the Prince of Wales to join in the ceremony. Insult intentionally and suddenly given by the President of the French republic, leads to an immediate declaration of war. The English fleet, unsuspecting of its real danger, moves to engage the battle-ships and cruisers of the French which merely serve as a decoy for their more than one thousand submarine vessels. How these latter accomplish their deadly work is told in a startling way. Then follows the invasion of England by three hundred thousand French troops, all in accordance with plans carefully arranged in advance—an invasion which takes place so quickly that the French battle-ships and transports are landing men at Sandgate almost before the Foreign Of-

fice knows of the declaration of hostilities; then follows the occupation of London, et cetera. This class of speculation, while improbable, nevertheless has some interesting points in view of existing complications. The subject is evidently handled by some one evidently familiar with the military details involved. The *nom de plume* would seem to indicate a French officer.

Self Culture for May comes to hand in a fresh spring attire and laden with good things. The magazine continues to merit the compliments paid it in high literary quarters, since, among the cheaper periodicals, there is none that maintains so uniformly high an average of excellence, or is a worthier exponent of the national and intellectual life. The magazine's success may well be accounted for if we take the present number, with its high order of timely articles and mass of instructive and entertaining reading, as an indication, as it undoubtedly is, of the character of the matter it currently places before its readers. The number opens with an important article on "Deep Waterways for Lake Commerce," and makes a strong argument for an American waterway connecting the lakes with the ocean. "The Fifty-Fifth Congress" is instructive and well-informed summary of the doings of the late session of the national legislature. The president of Colby University contributes a thoughtful paper on "The High Culture and the National Life," which deals interestingly with a university education and its value in equipping trained experts. The articles on "Brain and Brawn" and on "The Brookline Public Baths" touch informingly on topics of hygiene and physical and mental health. Science is represented, in a reminiscent vein, in the paper on "The Electro-Magnetic Telegraph" by Mr. Stephen Vale. Literature has a varied representation, in addition to several important book reviews, in the papers on "Lowell as an American Literary Critic," on "Victorian Thought and Thinkers," on "The Loves of Goethe," and on "Recent Canadian Verse." In the number Prof. Goldwin Smith has a further paper on "The Ecclesiastical Crisis

in England," dealing with Ritualism, and Prof. Ellison writes descriptively of nature in the Sierras in connection with a pen portrait of John Muir, the discoverer of the Muir Glacier. Other interesting papers, besides many entertaining articles in the several departments, are those on "Superstitions of the Sea," and on "Country Life as a Factor of Character Development." The number is tastefully illustrated.

MAY LADIES' HOME JOURNAL.—"The Countess Emilia," Anthony Hope's new romance, is begun in the *May Ladies' Home Journal*, and "The Art of Listening to a Sermon" inaugurates the first of a series of articles on the pulpit and the pew by Ian Maclaren. Another notable feature of the same issue is "The Secrets of a Happy Life," by the Rev. Newell Dwight Hillis, D. D., pastor of Plymouth Church, Brooklyn, who has become a regular contributor to the *Journal*. Paul Leicester Ford writes "The Anecdotal Side of George Washington," recounting some of the best but not least-known stories of the "Father of His Country." Viola Allen draws upon her own rich store of experience to tell "What it Means to be an Actress," and Joseph Edgar Chamberlin introduces "Helen Keller as She Really Is," giving some interesting glimpses of this marvelous blind and deaf girl.

On the editorial page Edward Bok treats of the pretty American girls, and discourses on the most-beloved women of the century. The feminine wardrobe is considered in elaborate detail, the articles being by the best fashion writers—and illustrated. "The Building of the Ship" is the theme of the sixth of W. L. Taylor's series of illustrations of Longfellow's poems, and pictorial features of practical interest are "Nature's Garden," "The Prettiest Country Homes in America," "Rustic Arbors and Summer Houses" and "The Flag in the Church." Maria Parloa inaugurates a new department, "Household Helps and New Ideas," and Mrs. S. T. Rorer gives the menus of "Little Dinners by Eighteen of My Girls" and writes of "Milk: Its Use and Abuse." Helen Watterson Moody defines "The True Meaning of Moth-

erhood," and Mrs. Humphry contributes her second article on "How to be Pretty Though Plain. In short, the *May Journal* has apparently anticipated every need that can arise in the home. By the Curtis Publishing Company, Philadelphia. One dollar per year; ten cents per copy.

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Society Reports.

NEW YORK ACADEMY OF MEDICINE. SECTION IN ORTHOPEDIC SURGERY.

Meeting of March 17, 1899.

LATERAL DEVIATION OF THE SPINE AND PES CAVUS IN FRIEDREICH'S ATAXIA.

DR. W. R. TOWNSEND presented a boy, 20 years of age. Since an attack of scarlatina at the age of seven, his nutrition had been very poor. The first signs of ataxia were an unsteady gait and inability to keep from falling if pushed. For the past seven years he had had frequent pain in the knees. Lateral curvature of the spine appeared three years ago and has steadily increased, a long curve to the right extending from the ninth dorsal vertebra downward, with rotation. A plaster-of-Paris corset had been applied with moderate suspension. There was pes cavus, but no equinus. The gait was markedly ataxic. Standing with feet separated and eyes closed there was swaying of the body. The patellar reflexes were lost. Speech was slow. There was nystagmus, but no Argyle-Robertson pupil.

DR. J. COLLINS said that it was a clinically typical case. In addition to disease of the posterior column there was sclerosis of the lateral parts of the cord, including the direct cerebellar tracts shown in persistent efforts of the patient to balance himself and producing the peculiar condition, found in every case and heretofore undescribed, aptly named the fork-prong condition of the extensor tendons, the feet being in continual balancing action with the tip of the toes digging into the substance of the floor. The dynamic deformities which later became static were the result of some connate lack of development in the anisotropic muscular

substance. The deformity might be explained by postulating the existence of some congenital incapacity of development, some abnormal condition of the proton of the muscular substance. The disease was progressive and usually uniformly so and might extend through half a normal life time. There was something attractive about the theory that some fibres of the spinal cord might have suffered *death* 50 or 60 years before the normal time, a death without active inflammatory or degenerative changes and akin to that which attended senility. The plaster-of-Paris corset could have no influence on the disease, but it had, in his experience, contributed to comfort. A potent agent in restoring the function of the muscles was the re-education of the extremities. The patient might be so taught that in a few months he would be able to walk into the room without perceptible disturbance of gait.

DR. S. KETCH said that the association of nervous disease with lateral curvature was suggestive. Many features of the latter affection could not be explained except by the presence of some prior defect in the nervous system. The case came near being an argument for the neutral etiology of lateral curvature.

DR. H. L. TAYLOR said that the argument was not convincing. The coincidence of nervous disease could not establish the neuropathic origin of lateral curvature which we saw also in collapse of the lung without rating pulmonary disease as an important etiological factor.

DR. A. B. JUDSON said that a nervous origin was not altogether improbable from the observation that the curvature appeared to be due to inability of the muscles to sustain weight while the muscular failure seemed to be the result of faulty innervation.

DR. KETCH said that in the absence of a demonstrable etiology he would adhere to the opinion that a large number of cases were caused by an antecedent fault in the nervous system.

CONGENITAL DEFORMITY OF THE LOWER EXTREMITY.

DR. KETCH presented a girl baby two months old, with great bony de-

formity of the right lower extremity. There was shortening and twisting of the upper end of the femur and all the bones were smaller than those of the left leg. The fibula was indistinct, giving only the feeling of cartilaginous hardness. The place of the patella was marked by a slight immovable eminence. There was marked equinus with inversion, the motion of the knee was greatly limited in extension and the spine was slightly deviated to the left in the lower dorsal region. There was dimpling and adhesion of the skin to the outer side of the lower end of the femur. The head had presented in an easy labor with the cord wound around the body so that it held the right foot on the left buttock, "so tightly bound there was no blood in the leg until an hour." The cause of the deformity was evidently retention of the parts in the foetal position by pressure of the cord, the limb being unable to escape and develop normally.

DR. TAYLOR said that the bones were all present, but the fibula seemed to be fully developed only at its lower end and the deformity of the foot was not the one usually associated with absent fibula. In these cases some bone was usually lacking or rudimentary.

DR. V. P. GIBNEY said that the clear history sufficiently explained the cause of the deformity. He recalled the case of a child born with dislocation of both hips and both knees, arrest of development being found at the knees and double club-feet of an exaggerated type. The elbows were defective and the movements of the shoulders rather limited. Repeated operations had been required with plaster-of-Paris retention and as a result the patient had for several years been walking about and going to school without apparatus or any other assistance. He had under observation another child with prenatal amputation of several fingers and double club-foot with arrested tibial development. The fibulae being very much elongated he had divided them obliquely about two inches above the malleoli and slipped the distal portion upon the proximal, thus bringing the foot into very good position.

CONGENITAL LATERAL CURVATURE OF
THE SPINE.

DR. R. WHITMAN presented a girl 7 years of age whom he had first seen when she was 9 months old. She then presented a well marked rotary lateral curvature of the spine that had been noticed by her mother immediately after birth. In spite of the application of braces and manipulation the curvature grew worse rapidly until two years ago when the tilting of the pelvis was so extreme that there appeared to be marked inequality in the length of the legs. The degree of the deformity was seen in a Roentgen picture. Since that time she had been under treatment by irremovable plaster jackets, applied with as much corrective force as could be borne, with most gratifying results. The pelvis became level and the limp had disappeared. The spine had become flexible and its deformity had been in great part corrected. This method of forcible correction and retention in severe curvatures of this class in young children appeared to offer the best chance of ultimate success.

DR. G. R. ELLIOTT said that the child's head, shoulders, hips and lower extremities were developed far beyond the thorax as one of the results of two years' encasement. The plaster-of-Paris jacket is advisable in proper cases, but it should be renewed once in three months and should be removed at least weekly to permit breathing exercise and massage.

DR. R. H. SAYRE said that bad effects do not necessarily follow prolonged treatment in the plaster jacket. He recalled the case of a boy affected with rachitic lateral curvature who was unable voluntarily to stand in an upright position. He was kept in solid plaster-of-Paris for a period of three years. When the jacket was removed, treatment to develop the muscles restored them to as good condition as the muscles of the rest of the body.

DR. TAYLOR said that he did not hesitate to immobilize joints and their acting muscles for years if necessary to arrest disease. He had never seen a case in which, after such treatment, the muscles were not developed to the limit imposed by joint

motion. It had been demonstrated clinically that when motion was restored to knees ankylosed for many years the muscles assumed their functional activity.

DR. KETCH said that atrophy of muscles and stiffness of joints caused by the application of plaster-of-Paris or a brace were of no serious moment and were followed by no ultimate bad effect.

DR. ELLIOTT believed that permanent injury followed prolonged confinement of children in plaster-of-Paris forcibly applied. He had a patient under treatment who had been thus treated for seven years and as a result a hopelessly bed-ridden invalid. It might be an exceptional case, but with a neurasthenic temperament and enfeebled muscles present the injury would extend beyond the possibility of rehabilitation. The muscles might revive, but the bones and cartilage of the thorax would be atrophied to the ultimate impairment of the heart and lungs.

DR. TOWNSEND suggested that the same improvement might have been secured if the jacket had been replaced by a firmly applied corset whose occasional removal would have permitted the employment of massage.

DR. WHITMAN said that the child had worn a brace which the mother was instructed to remove and give the child massage, but until the jacket was applied as described the patient grew steadily worse.

THE EFFECTS OF GYMNASTIC EXERCISES
IN REMEDYING THE DISPLACEMENT
OF THE HEART IN LATERAL
CURVATURE.

DR. T. E. SATTERTHWAITE presented a paper to the effect that the malposition of the thoracic and abdominal viscera which attended well advanced cases of lateral curvature might be considered as a constant menace to health and it could be inferred that the thoracic pain of this affection, due in some patients to neurotic conditions, was due in others to the faulty position of the heart which was generally displaced towards the concavity. He presented a patient, a young woman 24 years of age, affected with lateral curvature toward the right in the dorsal region of the

spine. The pelvis was tilted and the left breast was prominent. When first seen in the summer of 1898, she was pale, anæmic and short winded. The heart's action was weak and the apex one inch to the left of the nipple. After three months' treatment with resistant exercises, electricity, gymnastics and massage the anæmia was corrected, the heart's action was improved and the apex was well to the inner side of the nipple line. Its change in position was traced in diagrams taken successively during the progress of treatment. Two other patients were presented with similar histories and with diagrams showing the migration of the apex during treatment and coincidentally with the improvement in the general and local condition of the patient. These patients illustrated in person a long series of appropriate exercises in many of which indicated muscles were called into action by resistance applied by a medical attendant. The exercises were taken by the patient standing erect, leaning against a support, sitting, recumbent, semi-recumbent or suspended by the hands. In the majority of cases there was an advantage in combining force for the reduction of the deformity with some of the prescribed exercises and manual force should be applied without the assistance of mechanical apparatus. Double pressure should be made when practicable, one hand being placed upon the dorsal convexity and the other on the lumbar convexity each pressing towards the spine. As a rule tonics or nutrients were required; iron, strychnine, cod liver oil and malt extracts. Massage of the muscles of the back was a valuable adjunct and the Faradic current might be applied successfully during the entire course of the treatment, employed so as to contract actively the muscles of the back. An effort should be made, where practicable, to do away with the spinal brace, which should be advocated only as a temporary expedient or in cases in which all other measures had failed. By pursuing a more thorough and painstaking course than that commonly in vogue the heart and with it the lungs and in time the abdomi-

nal viscera might in a measure be restored to their natural position.

DR. SAYRE said that inspection of a preparation of lateral curvature showed that suffering from impeded action of the heart and lungs probably attended cases of well marked deformity. As a rule, however, such patients were not prone to die of disease of the heart or lungs and, although perhaps somewhat disturbed, they lived to a good old age. He had seen distinct relief of shortness of breath from treatment by exercises, and patients in whom the rapidity of the heart beat had been materially reduced. In one case the pulse rate came down from 120 to 90 when suspended and 106 when in a plaster-of-Paris jacket. He had a patient under observation in whom a murmur distinctly audible at some distance and in certain positions of the body, and sounding very much like a tin whistle, had disappeared under the influence of exercises.

DR. SATTERTHWAITE said that the murmur has been probably due to anæmia and a flabby condition of the chambers and ostia of the heart. He did not think that cardiac displacement in these cases gave rise to abnormal sounds, extrinsic or intrinsic.

DR. H. S. STOKES said that he thought it was very difficult to say whether the position of the heart had changed or not. It was the opinion of some observers that the heart could not be accurately mapped out during the life of a normal chest. In a chest deformed by lateral curvature the element of possible error must certainly be a large one. In his observation the result of treatment had been an improvement in the general condition of the child and the prevention of an increase of the deformity rather than an obliteration of the curvature.

DR. SATTERTHWAITE said that while many physicians among the Germans and English rejected methods of mapping out the heart, in this country observing the heart in this manner was accepted as practicable and important. He believed that it was easy to determine the position of the apex by the impulse and also by the use of the stethoscope.



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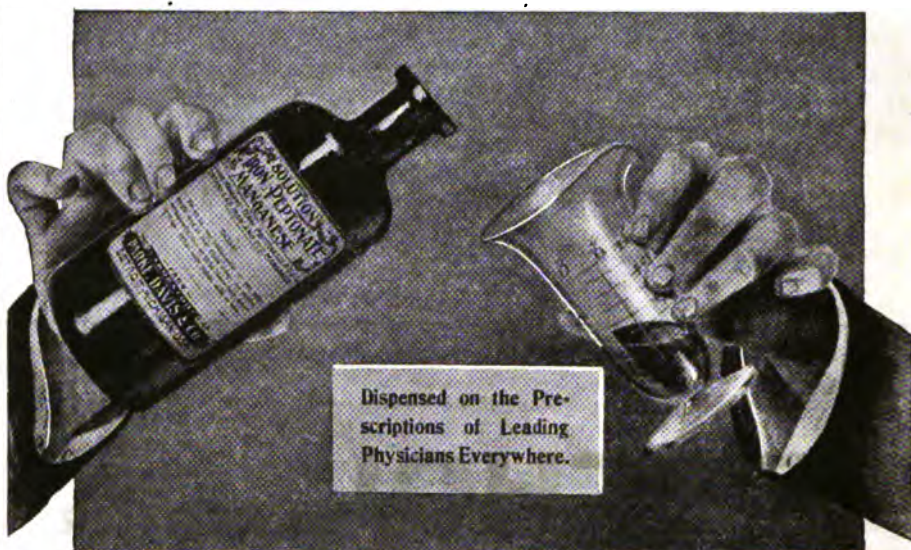
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DR. J. TESCHNER said that the heart could not be directly affected to an appreciable extent unless the deformity was so great as to crowd and displace it. He had not mapped out the heart in his cases, but its change of position as the result of treatment by heavy gymnastics had been obvious. In a girl 19 years of age a very severe rotary lateral curvature of at least ten years' duration was combined with cardiac trouble dating from acute articular rheumatism and peri- and endocarditis at the age of four. There was marked hypertrophy and dilatation, a double aortic murmur, a double mitral murmur and a very decided murmur over the pulmonary with the second sound. The murmurs were very widely transmitted. Dyspnoea was marked. Slight cyanosis at rest became marked on the slightest exertion. The heart had been growing rapidly weaker, cedema had appeared and her physician believed that she would live only a year or two longer. Beginning with very gentle exercises, in six months she was practicing heavy gymnastics and her physician expressed surprise at her improved condition. He found the heart smaller and changed in its relative position to the chest wall and none of the murmurs except the pre-systolic mitral transmitted to the side and back as before. Dr. Teschner believed that the deformity could be reduced by the voluntary and resisted efforts of the patient and not by external force. Electricity and massage were valueless when compared with voluntary exercise. The more the patient exercised the muscles through the medium of the will the greater would be the benefit. He thought that the exercises described and exhibited fell far short of what was required and that their effect in severe cases would be like that of an infinitesimal dose of a drug whose full physiological effect was desired. He thought that one curve could not be modified without a corresponding effect on the compensating curve. The trouble was not the deflection of a single vertebra, but of several, leading to the production of the sigmoid deformity.

DR. SATTERTHWAITE agreed that the different curves should be con-

sidered together as making up the deformity and added that in the treatment the muscles should be also considered together as it was impossible to exercise or develop one *muscle* or *group* without acting on all the muscles of the region.

DR. TAYLOR said that while electricity and massage were good they were not sufficiently good to cure lateral curvature. Reliance should be chiefly on muscular training and suitable apparatus. He would welcome any possible way of dispensing with apparatus which, useful in selected cases, left much to be desired. The hygiene of the patient was of great importance. The physician should regulate the food, schooling, exercise and rest. Piano playing was a pernicious occupation for a patient with a weak back. It should be moderated and usually stopped. One of the things which had held us back in the treatment of this affection was the difficulty in measuring and recording changes which take place. The position of the heart might perhaps in some cases be a useful indication. Measurement of the height from time to time was more easy and likely to furnish more reliable observations.

DR. SATTERTHWAITE said that he was in the habit of recording the height as a routine matter, but in growing children such measurements might be misleading.

DR. KETCH said that apparatus was of value in retaining the improvement gained through exercise which when properly conducted produced a good effect on the deformity and indirectly on the condition of the heart, for there was no doubt that the changes in the vertebræ themselves and in the chest walls and the diameter of the thorax gave rise to changes in the viscera. As long as rotation persisted no case of lateral curvature could be said to be really cured. This was always a menace and liable to increase and was the most difficult element to control. The bony changes which followed the muscular changes also made the treatment of lateral curvature very difficult. Curvature depending on simple muscular weakness was the easiest to control, but these were not cases of true rotary lateral disease. Each man should

work out his own ideas in regard to the question of exercises, remembering that no form of treatment would be of the slightest value unless it was continued for a long time.

DR. SATTERTHWAITE agreed that not all cases were suitable for the treatment which he had described. It could not be easily made successful in the case of out-patients, especially those who lived far away, and thus were unavoidably irregular in their attendance. The patients presented were all improving in general condition, the spine was gradually moving forward towards the normal position, while the heart in each had taken an improved position.

A PELVIC REST.

DR. TOWNSEND exhibited a simple apparatus to facilitate the application of a plaster-of-Paris spica to the hip. It held the pelvis and thigh up so that the roller might be conveniently passed between the patient and the table, and when the application was made and set the thin steel shelf on which the pelvis rested might be readily withdrawn from between the bandage and the patient. It was similar in action to the rest shown by Dr. T. H. Myers at the last meeting of the Section. The standard or vertical part, $6 \times 1 \frac{1}{4} \times \frac{1}{4}$ in., was forged at its upper end into a thin horizontal shelf 10×2 in., and at its lower end it was bent at a right angle to form the bar, 11 in. long, which rested on the table. Two cross-pieces, 11 inches long, of lighter steel were provided with mortises by which they could be removed for packing or adjusted by sliding them along on the bar until they were in position to hold the apparatus firmly, without rocking, on the table.

—:O:—

FETID CHRONIC LARYNGITIS.—

R Potassii permanganatis, gr. ij.
Aqueæ destillatæ, § ij.

M. Sig. Use in atomizer several times daily.—*Sajous, Ex.*

VOMITING OF PELVIC ORIGIN.—

R Menthol, o.3.
Elixir pepsin, 30.
Tinct, opii, 10.

M. Sig. Ten to twenty drops before meals.—*Lutaud. Med. Rec.*

Abstracts.

VARIOUS PHASES OF URICACIDEMIA.—

The following three cases published in the *London Lancet*, of January 14, 1899, illustrate so well the action of lycetol in various phases of the uric acid diathesis that their histories may prove of interest. The reporter writes as follows: "The first case was one of gouty sciatica of more or less intensity and of about two years' duration. During a desultory conversation not long since the preparation was accidentally alluded to as having been beneficial in similar instances, and though at the time skeptical as to any probable good that might result, I decided to try it. After its exhibition for ten days or so, very great improvement was apparent. At the end of the month every trace of sciatica had disappeared, and it has not since returned. The second case was one of rheumatic arthritis involving both carpal joints, especially the left, and the first phalanx of the left thumb. There was great pain, tenderness and enlargement of both joints. Lycetol was given in the usual doses of from 8 to 15 grains twice daily, at 11 A. M., and 4 P. M., and on two occasions it was taken thrice during the day. Within six days the pain had practically ceased, and within seventeen days the swelling and tenderness in each wrist had greatly subsided, the right one being nearly normal in size, and the swelling in the left, although not so markedly decreased, is still becoming reduced. The third case was not that of a patient, but of a brother practitioner, who for many weeks had been suffering from gout, and whose system was saturated with uric acid. I met this gentleman a few weeks since, and related my experience to him as above. As he had been ill some time with no marked abatement, he elected to try lycetol. I heard from him a few days since, and he says that the preparation "has done wonders for him" and "he will not be without it for the future." No other treatment was adopted, or any other drug used while lycetol was being taken, and it was administered in alkaline effervescent mineral water."

MEDICAL PROGRESS.—FORCED EXAMINATION OF THE LARYNX IN CHILDREN.—It is sometimes extremely desirable to have a chance to make a detailed laryngoscopic examination of young children. One is apt to hesitate, however, to employ general anæsthesia, and parents will object to anæsthetics unless some operative procedure is intended at the same time. Besides, laryngoscopic examination under an anæsthetic is usually unsatisfactory. For a physician who does special work on the throat some method of accomplishing this purpose of satisfactory laryngoscopic examination of children is absolutely necessary.

In the forthcoming number of "Progressive Medicine,"* the new quarterly review of current medical

fore, not only to control the tongue, but to pull forward the rima glottidis from the posterior wall of the pharynx, and so to provide good conditions for the employment of the laryngoscopic mirror. It is probable that on the principles used by Kirstein, in what he calls autoscropy, *i.e.*, laryngeal examination without a mirror, the examiner will be enabled, with a little practice, to see a good deal of the larynx (especially its posterior part, which is the more important one), by direct vision, and without the use of the mirror. The method of the manipulations with the new instrument is well illustrated in a diagram presented. In the second diagram the position of the instrument in the throat is well shown. It will, as a rule, be necessary, even



Escat's Laryngoscopic Tongue Depressor.

progress, Dr. A. D. Blackader, of Montreal, will describe two novel methods. The first is Escat's suggestion, and is instrumental. He has devised a peculiar form of tongue depressor, as shown by the accompanying figure. As may be seen in the illustration, the instrument is curved so as to adapt itself exactly to the base of the tongue. On the distal extremity a blunt fork is fixed, of which the two branches descend, one on either side of the epiglottis, ending in two rounded points which, when the instrument is used, are supposed to lodge in the pyriform sinuses on each side of the laryngeal orifice. The instrument serves, there-

with the instrument, to have the movements of the child restrained by a sheet rolled around its arms and legs in the usual way, and to have it carefully held on the knees of an assistant, but with this the examination of the larynx can be made much more satisfactorily than with the ordinary tongue depressor.

A simple method for the examination of young children is also given in the same number of "Progressive Medicine," which seems extremely practical and well worth noting. It was demonstrated by Lack, at a meeting of the Laryngological Society of London, about a year ago. The advantage of this second method is that no special instruments are required and no force employed. It is described by Dr. Blackader as follows: "The infant is placed in

* *Progressive Medicine*. A Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D. Volume 1, March, 1899. Lea Bros. & Co., New York and Philadelphia.

the usual position for laryngoscopy, the index finger is passed well into the mouth, and the terminal phalanx hooked around the hyoid bone, which is pulled forward. The rest of the finger acts as a tongue depressor, the knuckle as a gag, while the left thumb under the chin serves to steady the head. With the use of a small mirror the larynx can now be

several years my attention has been so repeatedly attracted by reference to modern herniotomy under the name of some persons unrighteously credited with having devised the operation, that it seems a duty to enter a formal protest. Leaving out of the question at present the slight modifications that are connected with certain names, I wish to call atten-



Diagram Showing Position of Laryngoscopic Tongue Depressor During Forceful Examination of Larynx in Children.

easily seen. The method causes no pain, and requires no anæsthetic, while the younger the infant the less is the resistance and the easier the examination." These manipulations certainly commend themselves by their ease and simplicity, and it would seem that the method deserves thorough trial that its merits may be tested in practical use.

OPERATIVE CURE OF INGUINAL HERNIA IN MEN.—Before closing the subject I wish to add a few words on the history of the operation. Though medicine knows no nationality, there is yet among us a sense of justice and "fair play" which desires credit given where credit is due and in addition there is just enough of right and use in a proper sense of patriotism to justify our claiming for our country that which is her due. It is not necessary for us to be constantly requiring the statement that "I am of Paul or of Apollos," but during

tion to the fact that it is usual to hear in our discussions and to read in our text-books and journals of "Bassini's operation for the cure of hernia." Now what are the facts? Bassini's operation embraces three points:

1. The use of animal sutures—though he applies it as a continuous suture—after excision of the sac.
2. The lessening of the internal ring from below upward.
3. The closure of the remaining fibrous structures over the cord so as to reconstruct the inguinal canal.

The relative importance of these items is in direct order of their statement, and priority may properly be claimed in use and publication for American surgery.

Bassini first made his method public in 1888 and a statement that he had been operating by that method since 1886 is hardly admissible in a claim for priority in view of the following facts:

In October, 1871, Dr. H. O. Marcy, of Boston, read a paper on "A New

Use of Carbolized Catgut Ligatures," which was printed in the *Boston Medical and Surgical Journal* for November 16, 1871. Lister had recently given to the world his experiments on the ligation of arteries with catgut, the ligature being buried and allowed to remain for absorption. This paper by Dr. Marcy included the *advocacy and description* of the use of catgut to approximate the walls of the ring so as to secure by buried sutures the healing and lessening of the hernial opening. This was supplemented by a paper before the American Medical Association at its meeting in 1878 and printed in its Transactions, in which he advocated the use of animal sutures to close or diminish the hernial openings, giving his reasons for such use from a practical and experimental standpoint. So far as the evidence is available, his publication was by several years the first that bore directly on the subject, having as an object the teaching of the use of buried animal sutures in closing or reducing the hernial opening.

I think it was in 1878 that Tilanus and Lucas Championniere read papers at the Amsterdam meeting of the International Medical Congress, in which they advocated the use of animal suture and Championniere gradually developed his method of *mattress* suturing of the tissues about the ring and canal, a method still used by him with excellent results. About the same time Czerny gave to the world his views in favor of excision of the sac and the approximation of the pillars of the external ring with animal suture. Again, in 1881, at the meeting of the International Medical Congress, in London, Dr. Marcy presented the subject,¹ and advocated the excision of the sac and to "*refresh* the pillars of the ring or walls of the opening and to close by sutures" of carbolized catgut, though he also used tendon suture from the moose and caribou. At the meeting of the American Medical Association in 1887, and again in 1889, he discussed the subject and in the two papers brought out all the points now regarded as important, to wit, the excision of the sac, the use of buried

animal sutures, the closure in layers, the restoration of the obliquity of the canal and the sealing of the wound.

It is possible that some references which would be germane have escaped me; I have omitted some as unnecessary; and I have entirely neglected to refer to the many expedients which are not directly related to the three points considered as essential, or have been dropped as inexpedient or useless. As the record stands, it is not just to American surgery to designate modern herniotomy by the name of a foreign operator. The wisdom of applying the name of any man to a procedure is open to some objection, though convenience often justifies it, but should it be applicable in this instance, we should speak not of the Bassini operation for inguinal hernia, but of the Marcy operation; for Bassini has not preceded other operators in any single item of importance, while Marcy was manifestly first in advocating and using buried animal sutures, in the use of cobbler's stitch, in the subcutaneous suture, and in sealing the wound by an impermeable and adherent dressing. Many operators are now using these expedients in total and unjustifiable ignorance of their origin and under a false appellation.—E. D. Ferguson, M. D., of Rensselaer County; from Transactions of the N. Y. State Medical Association, 1898.

REPORT OF AN UNUSUAL CASE OF CONVULSIONS IN A CHILD FOUR YEARS OLD, EXTENDING OVER FOUR DAYS, WITH ULTIMATE RECOVERY.—I was recently summoned to see a child with a history of having had convulsions every fifteen or twenty minutes for twenty-four hours preceding my visit. The history showed that the child had been in apparent good health up to its first convulsion, but had overloaded its stomach—besides the convulsions, the child had a high temperature, and was exceedingly thirsty. The child had been ordered large doses of bromide of potassium and chloral hydrate, and had received mustard foot baths, which did not however, relieve the condition. Laxatives were given, and also emetics, neither of which had a good result.

¹ Transactions London Int. Med. Cong., Vol. II, page 446.

The temperature of the body at my first visit was 105 in the rectum; pulse, 160; respiration normal. The child was in a stupid and apparently dazed condition, had a very furred tongue and complained of headache. The face was deeply congested, and the child had had several attacks of epistaxis. My diagnosis was acute gastritis of a severe type, and I attributed the convulsions to an overwhelming of the system with ptomaines, in reality a so-called toxic condition. My first suggestion was to use lavage and rid the stomach of all irritant food debris, so I cleansed the stomach with a weak table salt solution, using in all about two quarts of sterile water, to which a half-teaspoon of table salt had been added. In addition to this, I gave a very high enema, and flushed the colon until the water came away clear, using in all about six pints of plain sterile water of a temperature of 100°. The convulsions, which were both clonic and tonic spasms, recurred after each cleansing about once every half-hour. The duration of each attack being about two minutes, after which the child sank into an apparently deep sleep. Ordered hot mustard foot baths and an ice bag to the spine and also to the head. Large doses of chloral, five and ten grains per dose, giving the former per mouth, the latter dose given with a starch solution per rectum. This treatment was continued for twenty-four hours and as the convulsions continued, the following day one-tenth of a grain of extract *cannabis indica* was added to the other drugs, one dose ordered every two hours. I did not notice any decided improvement, although the convulsions recurred about once every two hours. Bleeding at the nose, however, ceased entirely. On the evening of the third day, during the height of a convulsion, I sent for six leeches, and applied two behind the ears, over the mastoid process of the temporal bone and applied four leeches from the nape of the neck, about three inches apart, along the spine. There was considerable bleeding, which was easily checked by applying a drop of collodion, and there was such a marked improvement that on the following day there were no convul-

sions for eight hours. Twenty-four hours after applying the leeches, I reapplied them in about the same locality. The child remained brighter, and the convulsions ceased. A careful dieting and cleansing of the gastro-intestinal tract with small doses of calomel completed the treatment.

What impressed me in this case was the great value of local depletion, and I am confident that most of the success attributed to therapeutic measures in this case was certainly due to the relief afforded by the leeches. One of the most convenient places is certainly behind the ears, and a leech can also be applied with considerable benefit in those cases of marked cerebral congestion at the *alae nasi*, for we have here direct relief through the frontal sinus.—Louis Fischer, M. D., Prof. of Diseases of Children in the New York School of Clinical Medicine; 187 Second Ave.

THE DIFFICULTIES OF DEFÆCATION IN INFANTS.—At the recent annual meeting of the American Medical Association Dr. T. C. Martin (*Gaillard's Medical Journal*, October,) read a paper upon the difficulties of defæcation in infants, in which he stated that it is generally recognized as a fact that infants and young children strain at stool. The infant and young child strain violently at expulsion of semisolid fæces because of the imperfect development of the anatomic features concerned in the mechanism of defæcation. These are:

I. The infant's lower gut is muscularly deficient.

II. Its mobility within the abdomen is obstructive to defæcation.

III. The rectal valves are obstructive.

IV. The infant's anus, not being sufficiently expansible, is also obstructive to defæcation. Records of post-mortem observations were read, and specimens of rectums exhibited which proved that:

I. The muscular development of the adult rectum and lower sigmoid is plainly apparent, and a deficient muscularity is observable in the infant specimens. In the infant gut the intrinsic power of peristalsis is

not present in that degree necessary to it as a component expulsive factor.

II. The mesoperitonæum of these parts in the adult is, relatively, considerably shorter than that in the infant. The adult gut is slightly tortuous; that of the infant is much angulated. Mobility and angulation of the infant gut conspire to obstruct the passage of formed fæces.

III. The rectal valve appears to bear the same proportion to the gut in both adult and infant, but when the difference in muscular development in the two is noticed, the disproportionate great resistance of the valve in the infant rectum becomes an obvious fact.

IV. The anal expansibility is adequate in the adult, but because of the greatly contracted bony pelvic outlet it is deficient in the infant, and constitutes an obstinate obstruction to the passage of semisolid fæces.—*N. Y. Med. Jour.*

WINTERGREEN OIL IN CHOREA.—Luigi has found the external use of oil of wintergreen very effective in the treatment of chorea. He applied the oil either pure or in combination with vaselin on the lower and upper limbs of the patient alternately; and afterward covered the parts with oiled silk to prevent evaporation. The quantity used was from one and a half to two and a half drams. In a few of the cases he gave it internally as well. All did well under this treatment, and it was noted that carbolic acid appeared in the urine six hours after each dressing. The author strongly recommends its use without regard to the presence or absence of distinctly rheumatic symptoms, and particularly in cases where other salicylates cannot be tolerated. *Brit. Med. Jour. Epit.*

HEMALBUMIN IN CHLOROSIS AND ANEMIA.—Dr. Golinier (*Deut. Med. Zeit.*) recommends hemalbumin for the relief of chlorosis, anemia, and gastric and intestinal catarrhs. An effective iron preparation, provided it contains nutrient material in a predigested condition, especially albuminates, whose absorption and as-

similation requires no tax upon the digestive system, is the treatment *par excellence*. Such a preparation of iron is found hemalbumin. It is a powder readily soluble in hot water or alcohol, and contains all the salts and albumins present in the blood, *i. e.*, hemoglobin with hematin, serum albumin, and paraglobulin, in the form of albuminates. Therefore hemalbumin closely resembles fresh blood in its composition, the fibrin alone being absent. The iron effects of the hematin, together with the nutritive influence of the albuminates present in this preparation, when administered in appropriate cases, are promptly manifested. The dose of hemalbumin is 15 grains three times a day.—*Medical News*, April 15, '99.

HÆMORRHAGE AS A SIGN OF CONGENITAL SYPHILIS.—In the course of the description of a case of hæmorrhagic congenital syphilis appearing as a hæmorrhagic vesicular eruption, Dr. William S. Gottheil calls attention to the importance of otherwise unexplainable bleedings in infants as symptoms of congenital lues. They may be the only mark of the disease, especially at first; but they are almost invariably accompanied by a diminution of the coagulability of the blood similar to that of hæmophilia, and the case usually goes on rapidly to a fatal termination. Disease of the vascular walls is one of the commonest and best known effects of the syphilitic poison, leading to hæmorrhagic discharges from the mouth, the bowels, the bladder, or the nose; to blood accumulations under the skin and mucosæ, or in the serous cavities and internal organs; or finally, making the syphilitic eruption itself hæmorrhagic. The author emphasises the importance of remembering these facts in the treatment of infants who have hæmorrhagic discharges or a hæmorrhagic eruption the course of which is obscure. (*Archives of Pediatrics*, June, 1898.)

ULCUS CRURIS VARICOSUM.—

B Sodii chlorat. subtile. pulv., 50.

Menthol pulv., 5.

—Simonelli, *Journal de Médecine de Paris*.

Notes and Comments.

THE DOCTOR.

BY MINNIE MAY CURTIS.

Who works from morn till set of sun,
Is all day long upon the run,
And yet whose work is never done?
The doctor.

Who, when at last he seeks repose,
And falls into a gentle doze,
And makes sweet music through his nose,
(The doctor)

Is roused up in the dead of night
By some one in a dreadful fright,
Who's sure she's going to die outright?
The doctor.

Who, when the days are scorching hot,
Can seek no cool sequestered spot,
Because he must be on the trot?
The doctor.

Who must an even temper keep,
And hide his thoughts and feelings deep,
To cheer up those who wall and weep?
The doctor.

Who has to hear of countless ills,
And deal out multitudes of pills,
To those who never pay their bills?
The doctor.

Who must be always very wise,
Ready to give profound replies,
Whatever question may arise?
The doctor.

Who, when the mercury is low,
Long, weary miles must often go
Through cutting winds and blinding snow?
The doctor.

Who must not show that it's a bore
To hear each family history o'er,
Five generations back or more?
The doctor.

Who takes our aches and pains away,
And gives us courage day by day,
To cheer us on our healthward way?
The doctor.

Who should be placed among the saints,
Whom history with us acquaints,
For patient listening to complaints?
The doctor.

A committee of over forty physicians, representing sixteen different medical societies of the City of New York, and including representatives of both schools of medicine; has been formed for the purpose of doing honor to the memory of Dr. Joseph O'Dwyer.

The first meeting was held at the New York Academy of Medicine, November 22, 1898, under the chairmanship of Dr. J. D. Bryant, and was mainly devoted to organization. Dr. George F. Schrady was elected permanent Chairman, and Dr. Alfred Meyer permanent Secretary, and the following committee on Scope and Plan was appointed: Dr. Dillon Brown, Chairman, and Drs. Robert Abbe, R. G. Freeman; L. Emmet Holt and Louis Fischer. At the second meeting, held at the

Academy of Medicine, March 13, 1899, the report of the Committee on Scope and Plan was adopted, and now only awaits final action of a meeting of the full committee.

The memorial to Dr. O'Dwyer will probably take an educational form, for by the plan now outlined it is proposed to raise a fund of \$30,000, the interest of which shall support two O'Dwyer Fellowships in Pædiatrics, open to competition by Physicians who graduate in the United States and to be held by the successful competitors for a period of two years. During this period they must furnish satisfactory proof of their engagement in original research work to a committee of five, one of whom shall be appointed by the President of Harvard University, one by the Dean of the Johns Hopkins Medical School, one by the Provost of the University of Pennsylvania, one by the President of the University of Chicago, and one by the President of the New York Academy of Medicine.

Many details of this general plan are still to be arranged, which it shall be the agreeable duty of the Secretary to furnish to the medical press of the country so soon as they are finally decided. This preliminary notice has for its object merely to acquaint the profession with the fact that a movement of this nature is on foot; and that an effort will be made to give it the international character so fitting as a memorial to an investigator of international reputation.

OINTMENT FOR PRURITUS.

R Mentholi, 3 j.
Cerat. simplicis, 3 ij.
Ol. amygdal dulcis, 3 j.
Ac. carbolicæ, 3 j.
Pulv. zinci oxidi, 3 ij.

M. Sig. Apply morning, noon and night, after cleaning the parts.
Louisville Med. Mon.

TO ABORT CORYZA.—

R Phenic acid, pure,
Spir. of ammonia, aa grm. v.
Alcohol at 90 per cent., grm. x.
Distilled aq. grm. xv.

M. Sig. Gtt. x on blotting paper to inhale every hour.—*Louisville Med. Mon.*

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Original Communications.

CLINICAL REPORT ON THREE CASES OF UNUSUAL IN- TEREST.

BY THOMAS H. MANLEY, M. D.,

Professor of Surgery, New York School of Clinical
Medicine.

CASE I.—*Mammoth Dermoid Cyst of the Scrotum, Complicated with In- guinal Hernia.*

Patient, a German, aged 60, mar-
ried, cigarmaker; rather steady

sixty. Always enjoyed good health
until seven years ago, when he fell
from a ladder a distance of about
seven feet. Shortly after this he
noticed a swelling on the right side.
Went to a physician, who applied a
truss. Soon after the truss was ap-
plied he noticed a swelling in the
scrotum. As the truss caused him
discomfort and failed to keep the
hernia up, he discarded it after wear-
ing it three months. For five years
after the fall he went about his usual
occupation, but after this time he

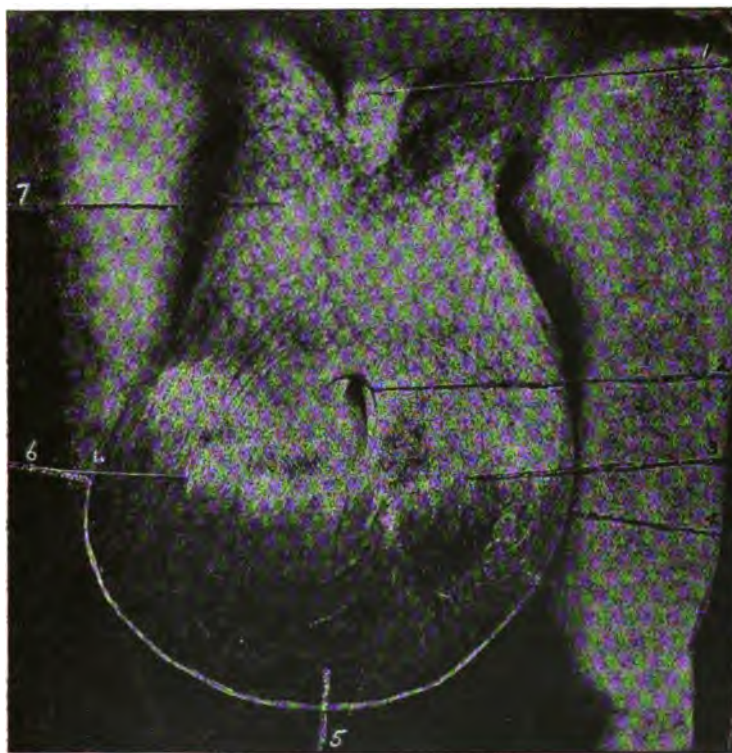


FIGURE 1.—(1) Root of penis; (2) Obliterated prepuce; (3) Left testis; (4) Outer aspect of tumor, left side; (5) Base distance, long axis, 18 inches; (6) Transverse diameter, 9 inches; (7) Site of hernia, reducible.

drinker, but never excessive; under-
sized and spare habit. (Fig. 1.) His
father at the age of fifty years died
from the effects of an operation for
a strangulated rupture. Mother died
from some pulmonary affection at

became conscious that the swelling
in the scrotum was rapidly increas-
ing in volume and giving him so
much inconvenience that he could
not sit with ease at his bench; stand-
ing gave him pains in the loins and

back; and he could only walk duck fashion, with his legs spread widely apart. For the past two years the scrotal tumor had attained such dimensions and weight that he had to give up all regular work. It was necessary for him to have a trousers specially made to cover the protrusion and a harness arrangement extending up over both shoulders and across the back, from which was suspended, a large canvas receptacle in which the vast scrotal bag rested. The effects of this mass finally began to tell on his general health, and, besides, there was no possible position he would take that did not augment his misery. This was notably the

an irritable bladder, with want of full control over the vesical sphincter, so that his night's rest was broken and his clothes were befouled by decomposing urine. There was no evidence of enlarged prostate. I found it impossible to make out the meatus urinarius, to pass a catheter and collect sufficient urine for a proper analysis. The lower limb on the side involved was markedly atrophied and paresic. Psychic symptoms were well marked; the patient was exceedingly despondent, and alleged that, while he was aware that some description of an operation was necessary, he knew well that he could survive none.

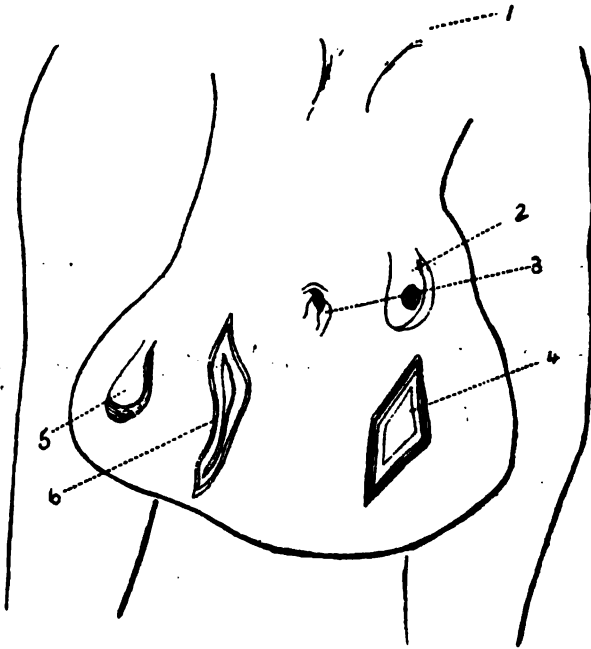


FIGURE 2.—(1) Root of penis; (2) Left testis; (3) Foreskin; (4) Incision on the left side; (5) Right testis; (6) Long incision on right side.

case when he retired at night, when he had to lie on the right side severely quiet, else any movement to turn the body caused a drag on the tumor, with much suffering. Dressing and undressing were awkward and painful, unless someone was at hand to hold the tumor up. In the heated seasons of the year his misery was great. On August 5, 1898, the patient was placed under my charge by Dr. George V. Hann, of this city. At this time his general condition was not good. Evidences of senility were well marked. He was weak; the appetite was poor and the digestion bad. He had frequent colicky pains and was constipated. He had

Local Examination.—On stripping the patient, a vast scrotal tumor presented. (Fig. 2.) The enlargement here was fairly symmetrical. The tumor extended well down, nearly to the knees, quite entirely obliterating the penis; the integument over scrotum was tense and smooth. By careful palpation the left testis could be felt, lying near the surface. On the left side the resistance to pressure was not so great as on the right, where the testis could not be located. At first sight the question arose—Was this a case of double hernia, or double hydrocele, or was it some description of cystic tumor? My examination of the patient in the erect

and recumbent attitude assured me that there certainly was a hernia on the right side, but that the protrusion was not large. The presence of the free testis lying on the surface precluded the possibility of hydrocele on that side. The history of the case with the symmetry of outline, convinced me that we had a neoplasm to deal with, complicated by a hernia. The mass imparted a sense of fluctuation and was everywhere flat on percussion. The tumor measured 28 inches over its antero-posterior diameters and 24 over the lateral. The tumor was placed on a starch-box resting in a scales, in such a manner as to relieve all possible

scopical examination revealed plenty of fat granules, disintegrated epithelia, crystals of the triple phosphates, urates, phosphate of lime and cholesterine. There was a considerable quantity of homogeneous material. In making the punctures to withdraw this fluid, the needle on the left side went in easily, but on the right force was necessary to send it through a very thick cartilaginous envelope. As a result of the examination, it was clear to my mind that we had a dermoid cyst to deal with, probably multilocular. Now, what was the most rational and the safest course to pursue under these circumstances?

Treatment.—In a healthy, vigorous

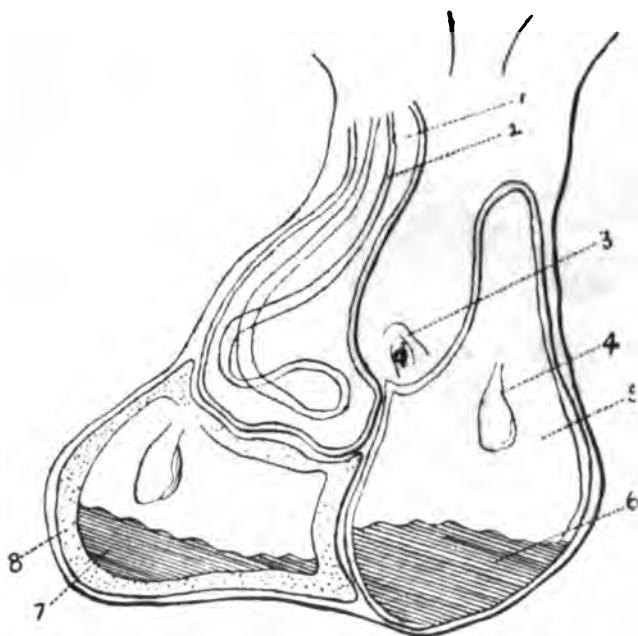


FIGURE 3.—(1) Hernia sac; (2) Intestines; (3) Prepuce; (4) Testis; (5) Fluids; (6) Putty; (7) Putty; (8) Cartilaginous walls on sac of right side.

tension from above and was weighed. The net weight was 14 pounds and 12 ounces, or 236 ounces. Being assured that, at all events, we had liquid of some kind to deal with, the next question was to determine its character. With this object in view, I passed in an exploratory needle, and under suction withdrew half an ounce of liquid from one side and the same quantity from the other side of the scrotum. This was of a reddish-brown color, odorless and of a watery consistence. Its specific gravity was 1020, reaction alkaline. Chemist who examined the withdrawn fluid reported it as containing urea, the urates, phosphates and biliary salts, especially cholesterine. The micro-

person it is clear that in any instance of cystic tumor of the spermatic cord, the epididymis or the testis, the course to pursue is complete enucleation. But here was a man of sixty, of broken-down constitution, with evidence of senile, degenerative changes. A very large dissection would be necessary. Contamination of the wound by the urine was quite certain, rendering primary union of the wound quite impossible. It was finally decided to make a free incision, to thoroughly evacuate and drain, with the hope that the endothelial surfaces might be destroyed, and that subsequent contraction might obliterate the cavities. By using cocainization, this would not

require the employment of pulmonary anesthetics and would not entail the dangers of shock from the loss of blood or mutilation, as in decortication. On the 10th of August, he was operated on, the parts having been first properly prepared and cocainized. He sat in a large chair, his legs being well separated and a receptacle placed underneath to receive the discharges. We commenced by making a free incision into the left side of the scrotum. (Fig. 3.) Through this was evacuated nine pints and a half of a reddish-brown fluid. Then three fingers were introduced and a large quantity of a brown putty substance, with hairs of various lengths were dug out. When this was cleared out and the cavity well irrigated with a 2 per cent. solution of the chloride of zinc, the tumor on the right side was opened. This had a



FIGURE 4.—Photo showing final result; restoration of penis, support for lux scrotum, and truss on right side.

thick, firm shell on its anterior and lateral aspect, but its posterior wall was elastic and flaccid. This contained a little more than three pints of fluid. There was not quite so much putty as in the left, but it was more gritty and contained several large particles of calcareous substance. When this cavity was evacuated, with three fingers in it, the right testis could be located, immediately posteriorly, having a very thick vaginal tunica. By lowering the patient's shoulders, the fingers yet in the hollow sac, it was easy to completely reduce the hernia, when the penis was restored. (Fig. 4.) The after treatment was simple. The patient was well sustained with tonics and nourishing food. His appetite and sleep returned, the colicky pains gave him no further trouble,

and he recovered full control over his bladder. Before operation he weighed 114 lbs. with his tumor, and now, three months later, he weighs 125 lbs. without it. The evacuated sac on the left side was firmly obliterated after operation, without infection; but the thick shell on the right side supplicated. The resisting, hard, non-vascular walls became gradually detached and it was possible to remove them piecemeal, *per morcellement*, until all was brought through the opening, when final, solid union followed. This shell contained plaques of bone substance, histologic cartilage and tufts of tubular racemose glands, with nearly every variety of epithelia. Now our patient is quite himself again. A considerable mass of redundant scrotal tissue remains, which he supports with an elastic pouch. The hernia is comfortably controlled by a truss, and locomotion is no longer attended with any inconvenience.

The case recorded belongs to a rare type of a very important class of tumors. Cystic tumors of the scrotum in the inguino-scrotal region, in both child and adult, are often confounded with, or mistaken for, hernia, or, as in this case, they may be complicated with it. In elderly or old men they are often mistaken for hydrocele. Sir Astly Cooper's diagnostic test in differentiation is a fallacious one, as he tells us that we may always recognize hydrocele, first, by its *transparency*; secondly, by its *fluctuation*, and thirdly, by the swelling commencing *from below*. But every surgeon knows that all these signs may obtain in serous cysts. Monod and Terrillous have written a classic treatise on scrotal tumors, and emphasized the importance of exact diagnosis in their management. Ten years ago the writer called attention to the great number of inguinal and scrotal tumors, which are mistaken for hernia or hydrocele, and pointed out that accurate diagnosis is in many of them only possible by a free incision, when one should be always prepared to complete operative procedures.—"Serous Cysts and Cystic Formations," *Internat. Jour. of Surgery*, June, 1888. Dermoid tumors of the scrotum are very rare: Curling speaks of them,

but declares that none ever came under his own observation. Good-sir, Erichsen and Marshall have each reported cases. Verneuil and Guer-sant collected and carefully studied nine cases. As to their cause Olivier believed that they were organic débris, originally of abdominal inclusion. The theory of fetal inclusion, however, is dissented from by St. Hilaire, Lebert, and Paget. Klebs and Kocher were of the opinion that when the tumor contained heterogeneous tissue, it might be dependent on accidental grafting in early life. Volkman and Freunzmer express the belief that these cysts originally spring from Giralde's hydatids in the epididymis, sometimes remaining undeveloped and provoking hydrocele, by erosion, or even rupture. Melchoir, in his record of 282 cases of hydrocele, enumerates 17 as complicated by teratomata on both sides. I can find no case reported of typical dermoid of the scrotum in a man so old as my patient.

CASE 2.—Embryonic Umbilical Hernia, containing the Stomach, Small Intestines, the Cecum and Colon, with the Liver, Spleen and Pancreas, in a New-Born Female Infant.

On the evening of October 12th Dr. L. Zwisohn, of this city, invited me to examine and operate on a newly-born female infant with a massive umbilical hernia (Fig. 5),

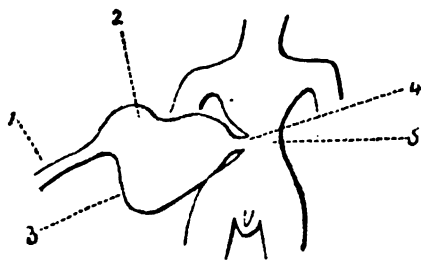


FIGURE 5.—TOTAL EVENTRATION.—(1) Umbilical cord; (2) Cavity of sac containing all the abdominal viscera except the kidneys; (3) Gauze-like envelope of sac; (4) Constricted isthmus at base; (5) Collapsed abdominal plates.

which presented features of strangulation and impending gangrene of sac. The offspring was an eight-month child, the first born; the mother had rather poor health during pregnancy, though her labor was natural. The infant was rather thin, but energetic, and had an immense ventral hernia through the navel opening. Soon after birth the infant showed signs of suffering, and the

thin envelope covering the protrusion presented a mottled color, with signs of impending gangrene. When Dr. Zwisohn was called in consultation he advised, as a forlorn hope, the chances of a kelotomy to relieve the constriction and possibly return the extended viscera. On examination I found that we had to deal with a genuine case of embryonic hernia, the mesoblastic structures of the abdomen lying quite entirely outside, the lateral muscular plates having never closed in. The mass was of globular outline with a narrow pedicle at the navel aperture, then spreading out into a large thin-walled sac with the umbilical cord extending beyond it. The envelope was of a dark purple hue, presenting patches of necrotic changes. The infant was etherized and a free incision made through the abdominal end. Now it was evident that there was no abdominal cavity, as nothing but a diverticulum remained, which would barely admit the tip of the index finger. Within the sac were the stomach, liver, spleen and pancreas, with the small and large intestine. Nothing could be done in the way of relief, and hence the incision was closed by suture. Six hours later the infant succumbed. An autopsy was refused. The type of hernia above recorded is very rare when of such proportions, for there we had quite an entire eventration, all the viscera being enclosed by Rathke's membrane. This deformity constituted practically a congenital monstrosity. The coverings of these herniæ are always thin, nearly transparent, avascular and very brittle. Berger, in his recent brochure, records thirty-two of these cases of the minor variety which were treated by the radical operation. Twenty-six recovered and six died. In one case recorded by Landerek, a part of the stomach was engaged in the hernia. Benedik, in another discovered the spleen. Both Goodloe and von Hofsten recommend early operation, while Thudicum records twenty-six deaths after the early operation. Forgue describes in detail the anatomy and surgical treatment of these herniæ when they are present in the minor degree. Broca has designated embryonic extrusion as "hernia into

SOME CLINICAL EXPERIENCE WITH TYREE'S ANTISEPTIC POWDER.

BY R. FRANK C. BROWNE,
PROVIDENCE, R. I.

Formerly Assistant to Surgeon of Cleveland Division
of Lake Shore and Michigan Southern Railroad;
Late Visiting Physician R. I. H. Dispensary,
and Examining Physician for R. I. Sick
Benefit Association.

CASE NO. 1.—*Nov. 10, 1897.* Mr. H. presents himself. Lawyer—age 30—unmarried. Has gonorrhoea, third stage. Profuse discharge, painful micturition, chordee. Has had two previous attacks. Ordered restricted diet and lithia or vichy for drink. Injections of plain hot water four times each day—six ounces each time—followed by two ounces of a solution prepared from one pint of boiling water and one drachm of Tyree's antiseptic powder.

Nov. 17th. Patient shows marked improvement. Discharge less profuse and more "watery" in character. Micturition less painful, much less frequent and has had only one attack of chordee since first seen. Continued same treatment.

Nov. 24th. Patient urinating without pain. No discharge. No chordee since last here. Discharged cured and reported two weeks later that there had been no return of the trouble. When leaving my office the patient said: "Doctor, that powder you gave me for injection must be *"great stuff,"* for I got out of my trouble the quickest and easiest I ever did." I have had equally as good success with a large number of similar cases during the past three years.

CASE NO. 2.—*Jan. 10, 1898.* Mrs. R., age 38, married, two children. Vaginal examination reveals stellate laceration of cervix, from last confinement, six years ago, which she positively refuses to have repaired. Has profuse leucorrhoea, which began three years ago. Color, dark greenish; character corrosive; consistency; clotted or stringy; offensive odor. Ordered vaginal douches containing four quarts of hot water administered with a fountain syringe, morning and night, and to be followed with one quart of hot water containing two heaping teaspoonfuls of Tyree's antiseptic powder.

Feb. 20th. Patient presents greatly improved condition. Discharge less in quantity, thinner in character and almost odorless. This examination was made in the afternoon, and, at my request, patient had not used the douche since bedtime the night before. Continued treatment, combined with an internal tonic till following August, at which time I discharged patient cured.

Feb. 24, 1899. Patient called at my office for another trouble. She reports no return of leucorrhoea, has gained 26 pounds in weight, and is well advanced in the second month of pregnancy.

I have had such good success in the treatment of leucorrhoea with Tyree's antiseptic powder that for the last eighteen months I have used nothing else for vaginal douches. For uterine douches after confinement or miscarriage; I have also met with gratifying success.

CASE NO. 3.—*July 7, 1898.* Mr. T., aged, 60, married, banker, presents himself. Extensive, third degree, burn of right hand, caused by premature explosion of fireworks on the 4th inst. The hand was dressed with such remedies as were at hand and had "gone from bad to worse," as patient expressed it, till it was in a shocking condition. There was extensive suppuration, offensive odor, and sloughing tissues. Ordered hand thoroughly cleansed each day with strong solution of Tyree's antiseptic powder and hot distilled water and covered with moist antiseptic gauze. This local treatment, with internal medication to combat feverishness and pain, resulted in patient's speedy recovery, and in two weeks the hand was healed, presenting at present but one noticeable cicatrix.

I was so much pleased with the cleansing properties of the antiseptic powder in this case (as all odor disappeared after the second dressing and suppuration decreased rapidly) that it is a favorite with me now as a local application in this class of cases.

These cases are taken at random from notes in my case-book, and are simply given as showing the results (in a variety of cases) obtained by the use of this excellent and scientifically prepared compound. *I have*

obtained better results, and in a larger majority of cases, from its use in leucorrhœa, vaginitis and urethritis, simple and specific, than from any other combination used by me in twenty-one years general practice. I am satisfied if physicians were only aware of its merits, this remedy would be much more generally used.

MEDICINE—ANTITOXIN—THE ARMY—LA GRIPPE.

BY C. B. NEWTON,
STAFFORD SPRINGS, CONN.

Reporter Tolland County Medical Society, 1890.

GENTLEMEN:—In reviewing the events of the past year of special interest to physicians we would refer to the army in Cuba and the present status of the antitoxins as viewed by physicians.

I do not recall that there has been anything new established in our practice, either in medicine or surgery. We notice that it is advised that some of the newer remedies should have a place in the dispensatory. There are a good many good remedies outside the *materia medica* as well as within.

While we should not at once accept a remedy without fullest knowledge of what it will do, we should *observe* them, for among their great numbers we have in the past found some of the many well worthy of a permanent place in medicine. The general practitioner has no time for experimenting with some new product of the laboratory or with some barbaric plant from the wilds of Africa. The lives of the sick ones in our care are not to be trifled with. Confidence in a drug is a thing of slow growth—some degree of scepticism is our safety—yet we are ready to believe when we have the proof. The opportunity for testing new products is best afforded by experiments upon animals and criminals who have been convicted of capital crime—if the law allowed—the law does not give scientists the legal right, but in the interest of science such a law would be a reasonable one, making it optional with condemned whether he will be hung or submit to some heroic experiment.

It would be no more revolting than hanging him by the neck till dead.

We admire the business way by which makers of nostrums bring them to our notice through their money and cheek. A short time ago, with compliments, the editor of a medical journal asked me to write an article of not less than a thousand words extolling a new medicine which he was advertising, of which I knew nothing as to its merits—if I needed any special literature on the subject I could get it by writing to the manufacturer, or if I needed any of the medicine for experimental use they would take pleasure in sending me all I wanted. I wrote them that I was too busy with the grippe.

This shows something of the inwardness of the way that notice of new fangled and cheap mixtures find their way to our office table. By the way, the editor offered to send me his journal for three years gratis.

The moral of this is subscribe for medical publications which are above this way of doing business.

You may have seen an illustrated account of the very latest way of curing consumption by Dr. Blank. He is showing a crowd of reporters his method, as he called it; the table was covered with electrical machines, and such apparatus as is seen in the chemical laboratory. He urges the readers of the *Herald* to write to him at once for his free treatment before it is too late and to mention the *Herald*.

Our medical practice act does not reach this class, but it prohibits a graduate from the best medical college in the United States or Europe from practice; or one of national reputation, without a rigid examination who may wish to locate in this state.

One attractive thing in the way of advertising new fads is taking a syllable from a Latin word with one from the English to arrest attention. A very late one is *ficus chocolatis laxans*—the interpretation is fig chocolate. A medicine man seeking money and fame discovers that carbohic acid is always found in the blood, that in disease, nature augments the acid a thousand times, so of course this acid is nature's remedy. He discovered that the acid he used hy-

podermically caused abscess; he then uses a solution of the acid heretofore unknown, which he calls aceptolin, a nice name, pretty enough for a girl baby. He says when this is injected into the blood the germs of consumption and all kindred ills are destroyed, and the blood is freed from every foreign element. Here comes another medical crank who finds that the hands are loaded down with bacilli, that all kissing is dangerous. George Francis Train is a firm believer in this danger, and he never shakes hands. A late theory relating to germs is that all the functions of the body are assisted by the warfare between the toxins and antitoxins. Prof. Hinschfelder, of California, has discovered what he calls oxytuberculin as a cure for tuberculosis used hypodermically; records seventy cases; sixteen were cured, thirty-six much improved, six slightly improved, six remained unchanged, five died. He does not reveal to the profession what oxytuberculin is, but he may contract with some manufacturing chemist who would put it on the market, the Professor sharing in the profit.

Scientists of the visionary class jump at conclusions. A keen observer once wrote to the *New York Tribune* that he had made the discovery that rat traps should be made of cedar; he had caught a rat in that kind of a trap and he didn't gnaw out, so to be sure of him always use cedar traps.

Pasteur in 1880 made known the result of his experiments of immunizing animals against infectious diseases. He predicted that it was "possible for man to eradicate every contagious disease from the face of the earth." One of his pupils said there are two periods in the history of medicine, "the one before, the other after Pasteur." He discovered that the toxic products of the germs, the filtered cultures from which all the germs were removed, could produce immunity. These results have been proved by many scientists. Fraenkel proved the immunization of animals against diphtheria.

Behring and Kitasato published their results on the immunization against diphtheria and tetanus. In 1872 it was shown that bacteria injected into the blood rapidly disap-

peared. Nuttall showed that defibrinated blood had this germicidal power. Other observers find that the blood within or without the body has germicidal powers.

These experiments show that the body has the power to kill at least some bacteria, but give us little insight as to how it is done. The important fact is that the immunity of one animal can be borrowed and transferred to another animal. Transfusion of blood was practiced centuries ago. Denis, in France, 1704, transfused blood of a lamb into a weak patient. In 1665, the physician to King Charles practiced transfusion of blood from one person to another.

In 1890, Ogata, in the hygienic laboratory of Tokio, showed that mice inoculated with anthrax germs could be saved if at the same time blood from an immune animal was injected.

There is the most convincing evidence that antitoxin in diphtheria lessens the mortality from this disease. *How* it produces such results is not so plain.

Dr. Rosa Engleman, of Chicago, gives these results from the use of antitoxin in diphtheria.

Antitoxin given by him in 72 cases. Antitoxin given by others in his district 30—recoveries 95—after antitoxin deaths seven. Seven deaths in 103 cases is a very low death rate, especially if one considers that fifty of the 103 cases were croup, the most dangerous form of diphtheria.

Dr. Markley, of Rockford, Ill, reported that in thirty cases he treated without the antitoxin there were seven deaths. Of 300 cases treated with antitoxin only six deaths were reported. This number comprises all cases treated by sixteen physicians of Rockford and only includes those cases which received the remedy during the first three days.

He gave the immunizing dose of 500 units in ten cases with perfect satisfaction everytime. He has given 1000 units at a dose, but thinks 2000 would be more efficient and prompt, if the case be at all severe. Young children take a turn for the better more promptly than older ones.

1000 units would be as large a dose for a child two years old as 2000 would be for one six years old, other things

being equal. He used Parke, Davis & Co's. antitoxin.

Dr. H. R. Slack, of Georgia, has had good success with its use, agreeing with the most favorable report of Committee to the American Pediatric Society. He recommends doses of from 1000 to 2000 units, according to severity of the case to be repeated two "or three" times, if needed, in 24 hours.

Dr. B. F. Harding, of Ohio, has given the remedy in 47 cases without a death. He holds with Loomis and Thompson that "the power of antitoxin to neutralize the poison of diphtheria toxin is an absolute fact." Its effect is so prompt that the family is often disposed to doubt the diagnosis. Results are obtained in from two to eight hours. In some cases was mild eruption. In addition used alcohol, strychnine and quinine, good diet. Serum should be used when in doubt. In other words, act on the worst supposition. Dr. Sutzer, of Mich., reports 31 cases with antitoxin, with two deaths. And 14 cases without the remedy with six deaths. Epidemic lasting from Oct. till middle of Dec., 1897.

The English, German and French journals all give statistics showing the decrease in mortality from the use of antitoxin. Yet opinion among careful observers differs as to its curative effects.

Dr. I. E. Graham, of Ohio, reports in *Columbus Med. Jour.*, which gives account of alarming symptoms from the use of antitoxin.

Child 13 years old, injected 500 units as a preventive, he began to sneeze, face congested, fast and labored breathing, rapid accumulation of mucus, asthmatic respiration, no pulse, cold extremities, lips blue, delirious, intermittent pulse; seven hours before return of pulse to wrist—boy recovered. Soon after he had an eruption over the whole body, disappeared in 24 hours.

L. Rosenburg, N. Y., relates a case, membrane on each tonsil, injected 2000 units in an hour, the mother noticed cyanosis of the lips; was taken with chill, then unconscious, temperature 109. Rigidity of neck muscles—used nitro-glycerine, digitalis, coffee and brandy per rectum; in twelve hours came out of the stupor,

vomiting, on third day the general appearance normal. The membrane had entirely disappeared.

Dr. Roulin, of Paris, uses phenate of sodium, mortality reduced to a minimum. The statistics of Paris show that mortality from diphtheria had begun to decrease before the use of antitoxin. Also decrease in mortality from typhoid fever, scarlet fever and small-pox, these diseases in larger proportion than diphtheria. Statistics are given since 1881, showing yearly diminution. The same diminution has been noticed in this country. He says serum is far from being infallible—causes cardiac paralysis, urticaria, abscess, debility and death. Death rate also from yellow fever has lessened. The number of cases at Franklin, La. were 70 in 1898, with only two deaths.

The question may be asked does diphtheritic antitoxin always attack the diphtheritic poison alone? The great impression it makes upon the nerve centers shows that it is sometimes a little wayward and cannot always be depended on. Most of our drugs have their vagaries. One patient can take an opiate and sleep, another will lie awake and see visions with eyes open. One inhales chloroform to the extent of most profound anesthesia unharmed, another of the same physical condition expires before the first anesthesia is reached from paralysis of the pneumogastric because of an idiosyncrasia of this nerve center.

It may be said that death is caused by poison of carbon dioxide, but alarming symptoms appear before cyanosis, besides carbonic narcosis acts fatally much slower.

Vaccination has caused tetanus in one child, while all the other children of the school vaccinated from the same virus at the same time escape tetanus.

Dr. Purjesz, of the Buda-Pesth Medical Society, claims that the utility of antitoxin injections is not proved.

Hungarian statistics show that the mortality from diphtheria fell from 22000 to 17000 in 1895. Yet from 1892 to 1894 it fell from 49000 to 22000. This was before the introduction of the serum treatment.

Jacobi says it is far from being proved that diphtheria is of micro-

bial origin. The theory of "no bacteria no diphtheria" is not proven, says Wood and Formad. Mosler says the operation may cause death.

Landois says it ought never to be transferred into the vessels of man. Franckens says it may cause extensive coagulation in the blood vessels.

We have an account of a young physician in the army, who before going to Cuba resolved to make himself immune to all tropical troubles, such as cholera, appendicitis, diphtheria, yellow fever, Panama fever, delirium tremens and tetanus, by the use of the antitoxins. But he was killed by a falling brick; he was not immune against falling brick.

We have had some remarkable accounts of recovery from bullet wounds at the battle of Santiago—perhaps for two reasons in *spite* of climate and most unfavorable conditions.

1. The lesser size of the Mauser bullet and its greater velocity.
2. The antiseptic treatment of the wound.

There are men who can show as many as eight bullet holes and by all the traditions of surgery they ought to be dead.

Norman Orme, of the Rough Riders, at the fighting line on his belly was struck in left arm splintering it, then entered his body at the left arm pit, ranged downward through his lung, smashed a rib, and remained in the man's body.

Captain Knox, of the Rough Riders was hit in small of the back by a Mauser bullet, to the right of spine, penetrating the muscles, passed through right kidney, liver and right lung, the bullet passing out of his body. Wound at point of entrance was of the size of lead pencil, it was deflected from its course and passed out of his body, making a large ragged wound. The Captain was soon out of danger and recovered.

Wm. Clark, Co. E, 24th Infantry. A bullet struck him in center of his forehead ranging downward then entering his back pierced his lung, compelling him to cough and raise blood. There were greater symptoms of lung injury than of the brain.

It is said that bullets covered with grease are apt to contain germs.

Brass covered bullets have been used to some extent by the Spanish army which caused greater wounds than the Mauser bullet. The United States army have been considering the advisability of using softer lead so that the wound would be more disabling by its spreading or mushrooming at point of contact.

Prof. Senn says our troops were provided with rations suitable for our climate, but not for a tropical country—were exposed to malarial infection in all the camps, occupied buildings in which yellow fever had full sway for years—filthy Cubans and refugees started the disease. Typhoid fever and diarrhoea increased the mortality. It was fortunate the enemy yielded to our arms so readily. He says that strict antiseptic treatment of wounds was practiced.

It seems to be so far inevitable that sickness will prevail in all armies in camp and on duty; rations are spoiled in a tropical climate; the impossibility of perfect sanitation in camp; the imprudence of the volunteer who has not been accustomed to a new climate; sleeping upon wet ground after great fatigue; all surroundings so completely changed that it must be expected that the mortality will be great. It is the history of all American campaigns as well as those of European armies. The haste in which we began war with Spain—only half ready—explains the many mistakes. Yet history will record our success as owing to the remarkable dash and bravery of our troops.

It is said that yellow fever is a disease of night. It is avoided to a great degree by avoiding the night air, but going out after the sun is well up, sleeping in upper rooms, avoiding the fever districts where the degraded and vicious live. Porto Rico is said to be more exempt from this fever than the coast cities of Cuba.

Whether the beef caused the diarrhoea and dysentery of our troops is in question. The climate, exposure to the intense sun heat, the dripping moisture of the nightly dew, the fatigue, sleeping of the volunteers upon the ground for the first time in their lives, would be a most prolific cause with the best rations possible. The

politics which show in the investigation, though needed, in my opinion is more odious and stinking than was the meat.

The influenza or grippe has been so prevalent the past winter as to excite much attention. In all the remote records of the epidemics the cold months are given as the time. All the epidemics on record have occurred during the prevalence of east winds in the cold months. Foggy weather at near freezing point, if continuous, will always cause the grippe. It is not contagious, as all are affected at once on exposure. It has prevailed ever since history began—ever since winter fog began.

Hippocrates mentions it and other ancient writers. The older English writers have given just such descriptions of epidemics as we would describe them to-day. This disease is no respecter of persons or parts. It is catarrhal with headache to-day and bronchial to-morrow with malaise and lassitude. There is hardly a disease it does not simulate. It is impossible to treat individual symptoms; it travels over the body so rapidly that it confuses the patient; to-day he thinks he has inflammation of the brain, to-morrow he knows he has bronchitis with all its variations and annexes, with a touch of rheumatism and diarrhoea.

The doctor is confounded with its fantastic imitation of so many ailments. At last the patient crawls out into fairer weather and wonders what kind of a nondescript sickness he has had. The doctor tells him that collectively and in general terms he will name it the grippe.

ATONIC ULCER OF THE LEG:

R Sodium chloride (finely powdered)

Menthol (powdered) aa 3 x.

M. Apply after cleansing surface of ulcer.—*Jour. de Med.*

PAINLESS BLISTER.—The following formula is given in *La Medecine Moderne*:

R Menthol,

Chloral hydrat., aa gr. xx.

Ol. theobromat., 3 ss.

Spermaceti, 3 j.

M. Ft. pasta.—*Med. Bulletin.*

CASES OF PSORIASIS, HEPATIC TORPOR, GOUT AND CORPULENCY.

BY C. H. POWELL, A. M., M. D.,
ST. LOUIS, MO.

Prof. Physical Diagnosis and Clinical Medicine,
Barnes Medical College, St. Louis, Mo.; Alternate
Physician to St. Louis City Hospital; Mem-
ber St. Louis Medical Society; Chest Clinic
at Barnes College Dispensary, etc.

PSORIASIS, gout and corpulency are three classes of cases that are in truth a bugbear to the medical profession. Hepatic inactivity is usually an associated concomitant of a fatty diathesis, whereas the intimate relationship that exists between psoriasis and gout is attested to by the efficacy of remedies addressed to the rectification of the uric acid diathesis. Many cases of psoriasis are considered incurable, the appearance of the patient is loathsome, the body in proportion to the extent and duration of the disease becomes covered with patches that are red in appearance, attended by smarting and itching that renders the patient's existence a continued menace to contentment. These patches in a short time become covered with a coating of albuminoid substances and minute particles of the clothing, which assist in the production of a coating that as the disease progresses is thrown off, and appears upon the removal of the clothing in the shape of flakes of epidermis. There are varied grades of psoriasis, the disease manifesting to a greater or less extent in different individuals. Psoriasis is a very common disease; much more so than the average medical man realizes. It shows itself in a number of different localities especially. Thus a favorite location exists on the external surface of the nose at its junction with the face, the creases found on each side are a suitable soil for the development of psoriatic patches. The eyebrow is also a common seat for the manifestation of the disease. In any locality, however, the clinical course of the trouble is identical; that is, the disease has a well marked tendency to continue, regardless of the application of any line of therapy. Outside of the points mentioned upon the face, the disease rarely spreads to any considerable extent upon the face. It

seems to require warmth for its propagation, together with a moderate amount of moisture, both of which conditions are found beneath the clothing; hence the preference for its extension in this locality. Age exerts a very potent factor in the cure of psoriasis; the younger the subject the more prospect of a permanent cure; and, *vice versa*, the older the patient the greater the difficulty in affording relief. Here is where the uric acid diathesis exerts so powerful a rôle in the premises, as the old subject is especially prone to be the victim also of gouty deposits, and the removal of these calcareous deposits is one of the most difficult tasks encountered by the physician. I do not mean to insinuate that every case of psoriasis is due to the uric acid diathesis, but that a very large number of cases of this trouble are intimately connected with said systemic disturbance there is no possibility of a doubt. Arsenic, the sheet anchor in the treatment of skin disturbances generally, is of little benefit in psoriasis. Ichthyol rubbed up in lanoline is of service as a local application; and, given internally, has exerted marked benefit in some cases. The iodide of potassium, probably on account of its solvent properties in eliminating the cause, has also given fair results occasionally, but the disease has always proven most intractable to medication. Corpulency is still another condition that only too often defies treatment. One of the greatest difficulties experienced in handling this class of cases consists in regulating their appetite. These patients are invariably large feeders; they consume a great deal of sugar in the shape of candy and rich dessert, and it is the most arduous task to place them upon any particular diet. Still another factor efficient in keeping up the adiposity is lack of sufficient exercise. Sluggishness is a characteristic of fat people, and the result is the body lacking its necessary exercise to carry away the elaborate material, there is formed an excess of said material proportionate to the needs of the animal economy; this excess becomes stored up in the shape of fat. The following symptoms are usually present in this class

of cases. First on the scene is dyspnea, then gastric disturbances are common, accompanied with intestinal atony; the bowels become constipated; this constipation is also often the result of the patient being too sluggish to attend to the summons of nature for evacuation. Headache is also a common accompaniment, sleeplessness at night, bad dreams and talking in the sleep characterize many of these cases. The heart may or may not take part in the fatty condition; if it does, then appear on the scene all of those manifestations of myocarditis, as accelerated pulse, pain over the precordial region, etc.

Having had my attention directed to thialion, a laxative salt of lithia, in the treatment of rheumatic and gouty disturbances, as well as corpulency, and experiencing so little satisfaction with the other agents in the field, induced me to experiment, which put the remedy to practical tests. The first case where it was administered was that of an aged patient, whose finger joints were all distorted from gouty deposits. I gave a teaspoonful three times a day in a little hot water, and continued the preparation for one week. There was no perceptible change in the swellings, but the pains, which had previously been a source of great annoyance to the patient, became markedly ameliorated, and she gained in weight about one pound in the course of two weeks' time.

A lady consulted me about the same time with a most extensive case of psoriasis I have ever come in contact with, the entire body being one mass of sores from the neck downward. Having used every remedy from arsenic to thyroid extract without the least improvement, I placed the patient upon thialion in teaspoonful doses every four hours in as much hot water as she could tolerate. The incessant itching at once abated, and the patches became paler in appearance losing their characteristic scarlet hue, coincidentally the scales would flake off in large quantities, and the patient was greatly benefited from the very beginning. Seeing the improvement so well marked I determined to reduce the amount of the drug, and accordingly gave a teaspoonful three times a day in place

of every four hours; the disease from that very moment seemed to take a fresh hold and I resumed the previous dose, whereupon she again gained in every way. As is a well known fact which all writers attest, psoriasis is intimately connected with a gouty diathesis, and it is my belief that the efficacy of thialion in the case was due to its beneficial influence upon the diathesis.

I placed a gentleman who was excessively corpulent upon thialion every four hours and noticed a reduction of five pounds during its administration; I also dieted him during this period and am accordingly doubtful as to the credit attributable to the remedy alone. Certainly, however, the results were satisfactory and thialion should be credited with its share of the outcome.

One of the very best uses of this salt, however, was found in its efficacy as an hepatic stimulant to be given after a patient's recovery from an acute attack of malaria or grip. As we all know hepatic inactivity is particularly preponderant after the disease has ended. This is shown by the patient losing appetite, they complain of general debility, have a pain in the back, are annoyed by hyperacidity of the stomach and upon awakening in the morning have a bitter taste and a heavily coated tongue indicating a cessation of secretion, especially of the bile and gastric juices. Give this class of cases thialion in teaspoonful doses in half a glass of hot water one-half hour before meals, and these unpleasant complications will not only be promptly removed, but the patient gains in strength and weight with a surprising celerity. In order to secure these results the remedy should be given alone and in the manner outlined. I am thoroughly satisfied from my own experience with this preparation that it has a wide and useful field in the different conditions herein outlined. I have resorted to it in several other cases where an hepatic stimulant is indicated and have yet to find the patient afflicted with this unpleasant complication it will not materially cure.

Infected wounds are best treated with moist dressing.—*Ex.*

THE TREATMENT OF CARBUNCLES.

BY MILTON P. CREEL, M. D.,
CENTRAL CITY, KY.,

President Muhlenberg County Medical Society; President Muhlenberg County Board of Health; Member Kentucky State Medical Society; Member American Medical Association.

THERE is no affection falling to the lot of human suffering that is attended with more pain and suffering than carbuncles. Besides the pain which they carry in their train, they are attended with much danger. As a cause of death, upon investigation, we will find that the mortality incident upon this affection is by no means contemptible. In this article I shall not deal with the symptoms or pathology of this affection, that being easily obtained by reference to the standard text-books on surgery.

One of the first considerations in the treatment of a patient with carbuncles is to see that he is well and thoroughly nourished. The importance of this is very manifest when we reflect how much debility is associated with the unfolding of a carbuncle. We should give regularly food of a nourishing character, and we must be satisfied that our patient gets enough to sustain his strength. Liquid diet and easily digested solid foods are to be given as regularly as we do our drugs. Milk, predigested foods, and everything which offers no resistance along the line of nourishment will be called into requisition by the wise physician. In this connection I must not omit to mention the value of stimulants in some cases. In patients who are extremely weak, either from the disease itself or from a poorly nourished state of the system existing before the supervention of the carbuncles, it is of the greatest importance to give some stimulant regularly. Whisky serves us well, but I generally allow the patient to select his own favorite liquor. I give stimulants often enough to keep the volume of the pulse good. There is no rule better than the one Jurgenson lays down; this, he says, "is the rule of consistency." He explains this by saying that stimulants should be given to produce the effect we desire. We must not

stand on quantity or dosage, effect on the pulse is what we must obtain; if large doses are requisite and frequent dosage is necessary, we must bring both to bear.

The old writers on surgery and practice advocated the abstraction of blood and the employment of drastic purgatives. It is not worth serious argument to convince the practitioner of the present day that such practice tends to intensify all the serious factors in the case.

I shall now speak of the treatment of carbuncles by drugs and by surgical means. Let me consider the treatment under two heads: First, the internal treatment; second, the treatment by local applications and surgical procedures. By the internal remedies are meant not, of course, foods and stimulants as have already been mentioned, but pure medication to correct the blood dyscrasia which gave rise to the carbuncular conditions. Iodides and sulphide of calcium have been administered, but they are not now relied upon by the profession. Both of these agents have utterly failed to modify in any way the progress of a carbuncle, and they have been tried thoroughly. Iron has also been tried and it, too, has failed, and is not now relied upon by the profession. For some months I have relied upon *ecthol* as an internal medicine. I have notes on fifteen cases treated with this agent. I employ it in doses of a teaspoonful every two hours. Its internal administration is the only drug which I can say has ever seemed to abbreviate the carbuncle. It is a corrector of blood dyscrasia, and in the best sense an anti-purulent. In this connection we may say that an anti-purulent is just what our therapeutics has lacked, and it is the first need of the practitioner when he has a carbuncle under his charge. Ordinarily I give no other internal remedy than *ecthol*. This remedy I continue until the patient has been discharged. But as improvement becomes marked and steadfast, I allow the interval between the doses to grow longer. First, he is given the remedy every two hours, then every four as he gets along substantially well. This given in doses of a teaspoonful acts very promptly in giv-

ing, as it were, a check to tissue disintegration. Of course, opiates are often called for to overcome the pain present, in some cases to an almost insufferable extent. Papine is the best way to exhibit this agent, since it does not produce interference with the secretions as in the case with other opiates. I give it in doses of a teaspoonful every one or two hours until the patient has obtained relief from pain.

Coming now to the measures which should be employed locally and surgically, let me say that this part of the treatment is as important as the giving of internal remedies. During the time the inflammation is beginning and up to the time when there is sufficient pus in the pointing carbuncle to justify an incision, I employed flaxseed poultices. These soothe and hasten the formation of the pus. An incision is now made, and the pus all emptied; the cavity is scraped and all the dead inflamed tissue is removed. It is then carefully cleaned with peroxide of hydrogen. Then absorbent cotton saturated with *ecthol* is applied to the exposed and adjacent surfaces. This is to be re-applied every four or eight hours, as the case in hand seems to warrant. Each opening is to be treated in this manner, and when we see a case of carbuncle with several centers ready to open we should remove as much of the diseased tissue as possible. Great freedom in the employment of the knife often greatly aids us in bringing about a speedy termination of the case in hand. It is the best thing we can do for our patient to lay the carbuncle open and remove all the diseased tissue, and treat the lesion then with *ecthol* locally. If we employ this agent as our internal remedy, and use it also as a local application, we shall find that our treatment will prove more effective than by methods employed formerly.

I have treated fifteen cases of carbuncles in the manner here outlined and the duration in each case has been greatly shortened, and the patients naturally got up with less weakness than they otherwise would.

Before employing this agent, a carbuncle meant a long spell and death or long-continued convalescence. The

average duration of my cases under this treatment has been ten days.

I now give a brief account of several cases treated by the method I have here advocated:

S. C. T., aged thirty-seven, a miner by occupation. He had been a sufferer from malarial fever for a month or so, but was able to work. He had a carbuncle about the size of the palm of the hand on the neck. There was a great deal of pain, and fever of 101° F. was present. His carbuncle had five heads or points, and seemed to invite incision, they showing the presence of pus. This was thoroughly opened and the diseased tissue was removed as thoroughly as possible. Peroxide of hydrogen was used to clean out the diseased cavity well, and then absorbent cotton saturated with ecthol was applied constantly throughout the course of the disease. Ecthol in doses of a teaspoonful was given every two hours. This patient began to improve at once, and there was no retrogression. The carbuncle began to take on a healthy action, and this patient was discharged nine days later.

Mrs. B. K. Y., aged forty-seven, had a carbuncle on her face. This was attended with high fever and delirium. This carbuncle had three openings. It was treated as in the former case as regards the local and surgical means employed. Besides these she had to take predigested milk and considerable quantities of wine, so weak was she. She took ecthol internally also in doses of a teaspoonful every two hours.

J. C. P., aged fifty-five, had a carbuncle on the nape of the neck. He had been a sufferer for years with asthma and was in a low state of health. This patient I regarded as one who would give me serious trouble, and who would, in all probability, die. The carbuncle was freely opened and treated in the same way as the first case here recorded as regards the surgical and local measures. He was from the first given predigested foods and stimulants, and ecthol was the only internal medicine he received, except some papine to relieve the pain. This man went along slowly, but he recovered fully, and was able to go about his

work seventeen days from the time I first saw him.

These cases are selected because they are ones which would test the efficacy of a treatment.

TISSUE BUILDERS.

BY N. M. BASKETT, M. D.,
MOBERLY, MO.

A GREAT desideratum in the medical practice is an ideal tissue builder. The busy practitioner frequently finds himself at a loss to decide upon the most efficient remedy for a given case, in spite of the great variety of drugs from which he may select. This is especially true in cases where tissue changes and waste are continuous, and where it is necessary to check the disintegration and repair and restore the waste of of cellular tissue, resulting from established cachexias. In these cases remedies are required both for their antidotal properties and their food values. Under these circumstances that remedy which most nearly meets the requirements of the case is of most value.

I am rarely constrained to lend my indorsement to any proprietary remedy, though admitting in a general way, that many of them are excellent for the treatment of diseases for which they are recommended. But I have found in the use of Cord. Ol. Morrhuæ Comp. (Hagee), such marked benefit, that I feel justified in calling the attention of the profession to its merits, both as a medicine and tissue builder. Its elegance and excellence as a pharmaceutical product, the ease with which it is assimilated, its retention by the most delicate stomachs, all make it desirable for exhibition in cases where the principal indication is to guard the patient's stomach. Used in anæmic conditions associated with chlorosis, where the catamenia are slow in asserting themselves or dysmenorrhea exists on account of a deficiency of red blood corpuscles, or in cases of menorrhagiæ requiring the use of a tonic, I have secured excellent results, and have seen patients rapidly relieved of untoward symptoms; while in debilitated conditions following typhoid fever when convalescence is slow, the effects

of the remedy are all that can be desired. During convalescence from pneumonia, when restoration is slow and the normal respiratory murmur is not rapidly established, I know of no better remedy. I have used it satisfactorily with children, recovering from summer diarrhoea, in connection with milk or some of the most desirable baby foods upon the market.

In the primary stages of phthisis pulmonalis, I have confidence in its curative powers, while it has proven of advantage in my hands in all stages of the disease. It is particularly in those cases where the stomach becomes so rebellious and so intolerant of medication, that I have found this remedy well borne and beneficial to the sufferer. I could cite many cases in which I have used the Cordial, but will only subjoin one for the consideration of the profession:

M. H., female, white, age 16, American, tall, slim, slightly cachectic, poorly developed, general health below normal, suffers from amenorrhea, has some cough, mammary glands undeveloped, pulse 90, elevation of temperature one-half degree above normal, no expectoration with cough, no sinking of tissues above clavicle, slight dullness on percussion in apicis of both lungs, auscultation reveals dry valves in apicis of both lungs, slight hoarseness. History shows that menses appeared at fourteen and were regular for three or four months though scanty and painful, then ceased and had not reappeared up to the present date. Prescribed Cord. Ol. Morrhuæ Comp. (Hagee), teaspoonful four times per day, tinct. ferri chlorid ten drops three times per day, and occasional hot hip baths. The menstrual flow was re-established in two months and recovery was rapid and uneventful. At this time the patient is in excellent health and has no tendency to relapse to her former condition.

GARGLE FOR QUINSY SORE THROAT.

R. Creosote, gtt. viij.

Tinct. myrrh,

Glycerin, aa ʒ ij.

Aq., ʒ iv.

Louisville Med. Mon.

ON PHYSICAL EDUCATION.*

BY C. P. ROBBINS, M. D.,
WINONA, MINN.

Member Winona County Medical Society; Southern Minn. Medical Society; State Medical Society; American Medical Asso.; Late Assistant Surgeon, P. B.; N. H. D. V. S., etc., etc.

ARTICLE VI, "PHYSIOLOGICAL METHODS."

THAT all morbid conditions of both the function and structure are deviations from the normal or physiological condition of living matter, no one will deny.

If the proposition be true, then the basis for the study of abnormal conditions is a correct knowledge of the actual physiology of all the parts of the living body. The more accurate and complete our knowledge of structure and function of any part, and its relation to all the other parts of the living body, the more readily we can appreciate all deviation of action or condition, so far as constitute abnormality.

If the correct knowledge of the actual or healthy structure and function of any given living part is the proper basis for studying the departure from that standard of health, which may constitute abnormality, it is equally true that the same knowledge must constitute the basis for determining the healthy action of all physiological phenomena.

Therefore, if we desire healthy conditions we must first comprehend the nature, mechanism and function of an organ and its physiological relation to all the other parts of the body of which it is a part, and second how to use physiological methods to produce the structures and functions to their normal conditions.

Among the methods which are strictly in accordance with biological reasoning, and therefore are strictly scientific, are hydro-therapy, aero-therapy, thermo-therapy and manual-therapy, diet and rest. One could not begin to cover the unlimited field of these applicabilities and usefulness.

First as to hydro-therapy. The greater part of our knowledge from water applications and their physiological principle has been done by Prof. Winterwitz, whose work on this

*Read before Winona County Medical Society, July 4, 1890.

subject has been classical among scientific books.

Water is a carrier of temperature. By exposing the surface of the body to the action of cold (or heat) we can cause a condition of cutaneous anæmia (hyoer anæmia) and coincidentally a congestion (depletion) of the blood vessels.

Goltz has shown it possible to deplete the head and extremities and send all the blood to the abdominal vessels in the body pack. The physiological action upon the sensory cutaneous nerves and through them to the central peripheral ganglia controlling the vaso motor nerves, thus acting on the muscular coats of the blood vessels, necessarily affects the process of nutrition, of tissue change, absorption and excretion.

An inflammatory process in any part of the body can be acted upon at any stage. During the acute stage of congestion it can be acted upon by abortion or drawing the blood to some distant part, thus depleting the affected area and depriving the inflammatory process of its working capital. During the inflammatory stage when congestion is over and the process of inflammation has been established the hydrotherapist again avails himself by derivating the process by carrying off the surplus blood crowding in upon the inflamed area. By hydrotherapy of the whole body he causes oxidation to take place more rapidly and thus absorb and excrete the products of inflammation.

To be able to control the quantity of blood and the rapidity of the circulation in any part of the body, means the power to control nutrition, absorption, excretion and secretion.

The unlimited usefulness of derivating (water applications) can be appreciated more in the treatment of chronic rheumatism, abdominal plethora, etc. The various neurosis (nerve sensitiveness) has been controlled and relieved by its marvelous effects. And so on, innumerable complications of abnormalities have been corrected in this way of derivating.

The physiological therapy and technique of derivating with water external (hot, warm, luke warm and cold) by douches, sponge baths, complete

and partial moist packs, sweat baths, etc., and with water internal of different temperature, by irrigation, drinking, flushing, injection, form a most fascinating subject.

Second as to manual therapy. The manual therapist avails himself of two essential factors, namely: motion and pressure. The general effects of the process tend to produce the development and maintenance of a sound symmetrical organism.

The fundamental and unnoticed work of the human economy, the cardiac contractions, the respiratory movements, the adjustment of muscular coats of vessels and viscera, the maintenance of vital heat, calls in 24 hours for the expenditure of six times as much energy as the days work of a man at hard labor.

Naturally, of course, exercise and vigor produce these results. But often nature fails and then there is produced a derivation of function and structure of normal and physiological conditions constituting disease.

It is here that the manual therapist exercises what nature fails to do. The general effects of the process is upon the promotion of oxidation, establishing secretion, stimulating nutrition for regeneration and to hasten absorption, etc.

Upon the vigor and activity of the involuntary muscles largely depend the vitality of the vessels and organs to properly perform their function, and to protect the body from deleterious influences. In the muscle, contraction produces heat, sound work and certain chemical reactions. There is a greater flow of blood to the working muscle, absorption of oxygen and nutritious material is increased, tissue change and formation of waste are accelerated.

Now the manual application of motion and pressure upon the cutaneous surface, influence the muscles beneath. The effect is not alone local and superficial to the parts operated upon, but to deeper and more remote parts as well and are therefore as much a remedial value in constitutional as local disorders. They stimulate both the chemical and mechanical activities of the muscular tissue.

The effect varies according to the rate of motion and degree of pressure

applied. Increase of pressure brings deeper organs into action, while increase of motion promotes every phase of chemical activity.

To those without experience the difference in effect between motion at slow and rapid rates, on muscular tissue, is greater than at first appears. Slow motions produce, chiefly, effects of a mechanical character. We notice them in many departments of bodily activity and are acquainted with their results.

They maintain the fluids of motion everywhere; through involuntary muscles, they supply the means of respiration, force blood through the circulation and assist digestion and assimilation. Furthermore, it is by means of slow motion that the system provides for the replenishment of its own muscular nutrition and power. All voluntary efforts, whether of exercise, training or labor, illustrate this method.

Now slow motion artificially supplied by manual therapy are of remedial assistance. All the above muscular conditions are aided by its assistance. Motion stimulates muscular contraction to the same extent and degree as emanating from nerves. This effect of suspending nervous action and becoming a substitute, is of inestimable value in several forms of chronic illness.

Another fact in slow motion, that in normal health correspond to emphasize and increase the effect for which the motion is used, is that slow motion is a natural radical permanent remedy to overcome every form of morbid nervous activity, together with the numerous and distressing consequences.

While the distinctive and characteristic effect of rapid motion is the promotion of all phases of chemical activity, this is not a special effort of the human body, for it always occurs by friction of all material substances.

A match is lighted by moving it rapidly with light pressure, which result will not occur with the same pressure and slow motion. The various chemical properties of the human body are the combination of food supplies with oxygen and are known by the term oxidation. The results are two-fold, the development of heat and vital force on the one hand,

and completely used or oxidized products on the other. Any remaining portions in the system obstruct the normal function of an organ, or degenerate into material, which becomes the direct cause of disease. Thus the oxidizing functions are always defective in some degree in ill health.

Rapid motion affords a complete, thorough and reliable remedy for every degree of insufficient oxidation. They not alone supply the needed motion at increased rates, but by this means demand more oxygen.

It is a physiological fact to which there is no exception that no matter how much oxygen is introduced no more will remain than can be absorbed by the blood and the amount avails nothing, until a demand is made for its use. Like money, it is of no practical value, until used.

Manual therapy by its oxidation process results in a trinity of effects, namely: An increase of local nutrition, a destruction and elimination of a considerable amount of deleterious and harmful substances and thirdly the results have been obtained by no expenditure of nerve force of the patient, which is so desirable to harbor in disease.

Associated along with oxidation by manual therapy is elimination. The process is always the result and not a substitute for it. It is the means by which all waste parts of the body find exit. Manual therapy employs the same means in elimination that this system makes use of in health. It stimulates the excretory organs, it produces its effects by intensifying chemical energy, as chemical power tends to the development and self perpetuation of muscular strength and activity, the natural source of all chemical energy.

As to the effects of pressure alone, the field is limited in its usefulness. We know we can inhibit nerve action by its use. We know we can influence respiration, circulation, etc.

It might be well to point out how congestion and inflammation are removed by the means of manual therapy. A congested part or an organ containing too much blood, as the circulation within this part is too much obstructed, the minute capillaries are over taxed and cannot do their work effectively with too much

work to do. Furthermore, they occasion an effusion of water portions of the blood in the tissue which adds more to congestion.

These fluids are charged with nutrition, which deprived by stagnation and healthful change, become a foreign material to the part.

Manual therapy by rapid motion on the other parts of the body causes an extra demand to be made for increased supply to furnish extra nutrition to the muscular action incited. Naturally the nearby area of excess is first to recognize and yield to the demand.

Its contents are not alone invited but compelled to enter the newly provided field, thereby establishing physiological drainage. By the same means the relieving of distended blood vessels in this part gives them opportunity to react and stimulated by nerve impulse they are transmitted to the weak vessels as well.

In all cases of congestion, osmoses is imperfectly carried on. By hastening the motion of fluid we hasten osmoses. So to intensify the motion in localized congestion we hasten osmoses.

As to inflammation of tissue the manual therapist promotes general oxidation, hastens general elimination, stimulates secretion, harbors nerve force, thus calling for a greater demand for nutritive material and taking it where the supply is greatest necessarily the inflamed area. The inflamed area stops its overwork of tissue, being deprived of its extra nutrition and returns to its normal condition.

Third as to aero-therapy or the topical application of air condensed or rarefied. By modifying the pressure of the atmosphere upon the body or respiration, we influence physiological action and change pathological process. Air may be modified for therapeutic purposes, not only in respect to density, but likewise in respect to temperature, moisture and chemical composition.

Naturally rarefied air exists in high altitudes and is more condensed at the sea level. Artificially air may be increased in pressure or diminished to effect either respired air or the surrounding atmosphere. Condensed air bath or the air respired with the

surrounding atmosphere the same, and the rarefied bath likewise produce one form of remedial measure; while the differential pressure bath is the emersion of the body as a whole in condensed or rarefied air and breathing normal atmosphere.

In the respiration of inspired condensed air the muscular effort of respiration is diminished and the alveoli dilated. There is increase in the quantity and penetrating force of inspired air, therefore reopening air cells disused from weakness or excluded by plugging of the bronchii with pathological secretions.

There is an increase in volume and weight per volume of oxygen. A greater area of blood surface is thus reached. The immediate effects are diminished, frequency of respiration, increased expansion, ventilation and gaseous exchange, while the ultimate effects would be to increase vital capacity, increase ventricular systole with quickened pulmonary and arterial circulation, thus bringing more blood to the surface for aeration. The blood charged with more oxygen circulates more actively in the system, penetrates the capillaries and lymph spaces more readily and is richer not only in oxygen but nutritive material as well.

The pressure on the diaphragm transmitted to the abdominal viscera stimulates the absorption of chyle, while heightened pressure and quantity of blood in the viscera stimulates functional activity.

Thus the effects on pathological conditions are due to the effect on respiration, circulation and nutrition. The local effects of its mechanical pressure redeem pulmonary hyperæmia, hasten absorption of inflammation products and gives tone to the bronchial mucous membrane.

On the expiration into condensed air, the pressure effects are similar to those already told. On the inspiration of rarefied air, chest expansion becomes greater if the effort can be made. The elastic tension of the lung is increased thus allowing greater volume of tidal air. On the expiration into rarefied air the contraction of the thorax is aided, facilitating the collapse of distended air vessels. Inspirations are rendered more easy and deeper, thus increasing the gase-

ous exchange and the gain in vital capacity much more. But by inspiring condensed air and expiring into rarefied air, increases the efficiency of both processes by increasing muscular effort, prolonging respiration with increase of circulatory activity. The differential pressure bath or condensed or rarefied air on the body has more of general effect than local, and exist not alone during the time of taking it but continues after the patient has emerged from the pneumatic chamber.

Upon the nervous system the effects are sedative and on the respiratory system, inspiration becomes easier, respiration more laborious, respirations are increased in depth and diminished in frequency, the mobility of the thorax and elasticity of the lungs are increased. The lymphatic and venous circulations are stimulated more to action, thus favoring absorption and quickening body metabolism.

Fourth as regards thermo-therapy, or the application of heat to the body. As a cardiac stimulant it is a valuable adjunctive to a weak heart, but if applied too long it diminishes its action.

To promote perspiration and thus favor elimination is one of its most important applications.

Fifth as regards diet,—“All human history attests that happiness for man, the hungry sinner, since Eve ate apples, must depend on dinners.”

Methods have been tried in diet for the purpose of aiding the cure of disease or the establishment of functional activity of organs to normal action. The skim milk diet is employed when fat is not desired. The buttermilk diet has been useful in certain gastric disorders, diabetes and nephritis as it contains nearly all valuable properties of milk save fat. The whey diet has been used in irritable stomachs and acute fevers. The grape diet has been used where a great amount of sugars are needed in the economy. The dry diet has been used in dropsies, diabetes and dilatation of the stomach. The meat diet is extremely useful when great amount of proteids are required and are prepared under the beef tea, mutton broth, beef juice and meat juices.

The vegetable diet is good for certain morbid states consisting chiefly of the cereals, grains and leguminous plants.

Practically the diet of any individual depends largely on his education, social standing and habits in life, time and method of taking food, and proper feeding, with proper cooking and proper serving.

Sixth as regards rest. The blessing of rest and repose by calm and peaceful sleep or mechanically enforced, is one of nature's greatest forces of repair. Growth, the anti-type of repair, stands in the same relation to rest as cause and effect.

As to the mechanical means employed by nature to produce rest the spleen with its capsule and elastic tissues when the organ becomes too much congested may be compressed and reduced to comparative emptiness. Rest fosters the production of the highly organized tissue. An illustration may be formed in the fact that in infancy the child who sleeps generally thrives. Growth seems to claim sleep and rest as helpmates. Repair is only the repetition of growth. Rest is necessarily antecedent to the healthy accomplishment of growth and repair. Growth and repair bear an exact relation to rest, local and general.

Rest on the nervous system has the effect of strengthening nerve force, promoting growth of tissue and repair of waste.

The kidney with its elastic and suprarenal weight of the colon may deplete itself and force rest. The lung with its elastic tissue the same, and the albuginea of the testules tend in like manner to empty that organ and give rest. And so all the organs of the body even the brain tissue has provided a way for rest.

If a serous membrane is inflamed, coagulated lymphs are thrown out to cure the injured surface and hold them at rest until repaired.

We see the same in fractured bones take place by the temporary callus. With mucous membrane the mucus is thrown out to protect the inflamed area until healed. Consider what an excellent thing sleep is: it is so inestimable a jewel that if a tyrant would give his crown for an hour's slumber, it cannot be bought: of so beautiful

a shape is it that, though a man live with an empress, his heart cannot be at quiet till he leaves her embracements to be at rest with the other; yea, so greatly are we indebted to this kinsman of death, that we owe the better tributary half of our life to him; and there is good cause why we should do so; for sleep is that golden chain that ties health and our bodies together. Who complains of want, of wounds, of cares, of great men's oppressions, of captivity, whilst he sleeps? Beggars in their beds take as much pleasure as kings. Can we, therefore, surfeit on this delicate ambrosia? Can we drink too much of that, whereof to taste too little, tumbles us into a churchyard, and to use it but indifferently throws us into Bedlam? No! no! Look upon Endymion, the moons minion, who slept threescore and fifteen years; and was not a hair the worse for it!

I could not begin to cover in the space of my limited time the almost unlimited field of its applicabilities and desired results in the realm of treatment. The physiology of these methods are as simple as they are exact. Their influence is only in its infancy, their results increase as we know more about them, and they stand to-day on the threshold of science in the greatest advancement of remedial measures the world has ever known.

Enough has been said to demonstrate what is meant by the physiological methods and to show their superiority over empirical methods generally.

It must of course be admitted that in consequence of our meagre knowledge of many physiological problems our conception of disease and its manifestations in many instances is necessarily indefinite and imperfect. But it would be neither prudent nor just to throw away what we know of physiological methods simply because our finite intelligence has as yet failed to fully grasp how fearfully and wonderfully our organism is made and has yet to solve many a physiological problem of health and disease.

We should find satisfaction in arriving at the highest degree of exactness and adopting means to that end. We should subject our methods to

criticism and analysis. In the therapy of disease that which is rational and physiologically conceivable should always take precedence to that which is vague and empirical.

In regard to strictly physiological methods we should in every case give them the thoughtful consideration and scientific application which they require if we expect them to do what they are capable of doing.

The true physician individualizes his cases and analyzes his methods. His mental horizon is bounded by the limits of scientific truth itself. "Know ye the truth for the truth shall make you free."

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WHAT SHALL THE PHYSICIAN SAY TO A GONORRHOÆAL PATIENT WHO WISHES TO MARRY?—Kromayer (*Mün. med. Woch.*; *International Med. Magazine*) sums up the question as follows:

If the presence of Neisser's gonococci is demonstrated, the physician's duty is clear and needs no elucidation. But, if the bacteriological examination is negative, his answer should cover the following points:

As a negative bacteriological examination is not an absolute proof of the absence of gonococci, it is the patient's first duty to make an earnest and sustained effort to rid himself of the gonorrhœa or chronic inflammation of the urethra by a systematic course of specific treatment. This is not to be neglected even in cases where the examination has for a long time repeatedly failed to detect gonococci.

If a complete cure is found impossible, or if the patient refuses to subject himself to further treatment, the physician should explain the case under its various aspects and leave the decision with the patient. In no case is the physician to assume the responsibility of the gonorrhœa not becoming infectious.

If the patient decides to marry, the physician should impress upon him the fact that he is still capable of giving the infection and must, therefore, observe the following rules in sexual intercourse:

1. Urinate immediately before sexual congress to expel any secretion that may have accumulated in the urethra.

Avoid as much as possible having intercourse oftener than once a day.

3. Never perform the act twice in succession, because, if the first seminal discharge contains gonococci, the friction attending the second coitus brings them into closer contact with the urethra and cervix, thereby increasing the danger of infection.

If this rule is disregarded and the act is performed more than once in twenty-four hours, the vagina should be thoroughly flushed out with a vaginal douche, which should, in general, be employed as often as possible.—*N. Y. Med. Jour.*

SYPHILIS OF THE UTERUS.—Legrain (*Ann. des Mal. des Org. Génito-Urin.*) reports on three cases of syphilitic disease of the uterus. In all three cases the uterus was uniformly enlarged, but not fixed; the cervix was not ulcerated or eroded. In two cases there was metrorrhagia and anemia, and in the third purulent endometritis. Two of the patients had other syphilitic manifestations. Under specific treatment all recovered, the uterus resuming its normal size. The author considers these cases to be parenchymatous and fungous metritis, caused by diffuse cell infiltration of the uterus rather than gummata. He thinks syphilis of the uterus more common than is generally supposed, and that some cases diagnosed as fibroids are really syphilitic.—*Brit. Med. Jour.*

A NEW OPERATION FOR THE RADICAL CURE OF HYDROCELE OF THE TUNICA VAGINALIS.—Dr. J. J. Pratt (*The Indian Medical Gazette*) describes an operation which he believes to be specially suitable to hydroceles of moderate dimensions. In the enormous hydroceles he thinks it would be best to perform a modified excision, removing the anterior part of the sac before everting. He performs the operation as follows: After careful shaving and thorough washing and cleansing of the parts; the scrotum is made tense by being firmly grasped in one hand, an incision is made along the whole length of its long axis, the tunica exposed and the testicle almost entirely withdrawn from the scrotum; then, the

tunica having been punctured with the knife, the puncture is enlarged with the scissors to a sufficient extent to allow of the testicle being drawn out through the opening. This having been done, the parietal tunica is turned inside out, and the opposite edges of the incision in the sac are united behind the epididymis by a single catgut suture. The cavity of the tunica thus ceases to exist, and the testicle and epididymis are covered almost completely by one continuous layer of serous membrane. The skin incision is closed with a continuous suture and the operation completed.—*Medical Record.*

CYCLIC VOMITING.—Prof. Whitney (*Archives of Pediatrics*) reviews the subject of paroxysmal vomiting in children and relates a case in which the attacks occurred at regular intervals of three months. Periodic vomiting was first described by Leyden in 1882. The affection is rare, but often very severe, attacks coming on without discoverable cause and persisting for a long time and being followed by prostration. The gastric crises occur at intervals of from six weeks to six months. It appears to be a gastric neurosis. Rachford has found a large excess of poisonous alloxuric bodies, particularly paraxanthin and heteroxanthin, in the urine. Treatment relates to general hygienic measures, milk diet, free use of one of the lithia waters and salicylic acid or salol.—*Ex.*

QUININ AMAUROSIS.—Ball gives a concise résumé of quinin amaurosis which may be of interest to the general practitioner. The dose causing blindness varies from fifteen grains to an ounce, in twenty-four hours. According to DeSchwinitz there have been reported up to the present time sixty-nine cases. The symptoms are: Total blindness following the ingestion of large quantities of quinine; with pallor of the optic discs, contraction of the visual fields, and widely dilated pupils—which do not contract upon exposure to light. The prognosis is favorable so far as central vision is concerned.—*Progress of Medical Science.*

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John J. Berry, M. D.,
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Editorials.

TUBERCULIN AS A DIAGNOSTIC AND CURATIVE AGENT.

ACCORDING to late reports, the application of tuberculin to the diagnosis of human lesions, bids fair to become in time one of our routine methods. Certainly its continued and increased employment in veterinary practice has proven its value and reliability so far as diagnosis is concerned. The early attempts to apply the principle to human subjects were unsatisfactory, however, and its extensive use by the disciples of Koch did little to increase its popularity. Recent investigators have, however, reported series of cases in which the use of tuberculin in doses of from one-half to ten milligrams has been found a valuable diagnostic aid in suspected cases of tuberculosis. In the light of the early investigation, its efficacy and reliability is a matter of some surprise. Otis reports 56 cases of cervical adenitis, in 33 of which the tuberculin gave a decided reaction. This is not only a proof of the value of this agent, but a demonstration of the tubercular nature of these glandular enlargements. The most remarkable results, however, are those of Trendelenburg, which are ninety cases of surgical tuberculosis, with but one absence of reaction. When, however, it comes to the curative properties of this agent, the evidence is of an extremely confusing and contradictory nature. It is true that a few authentic cures have been noted, yet

at the present writing the employment of tuberculin in the majority of cases seems scarcely justifiable. Yet the verdict of the recent German congress was to the effect that the measure was a valuable one and worthy of further investigation and employment.

At present the question whether or not tuberculin may light up an acute process, or open up diseased but hitherto incapsulated foci in various portions of the body is a debatable one, and until we are assured of the perfect safety of the procedure, it cannot attain general recognition at the hands of the profession.

THE X-RAY IN DERMATOLOGY.

THAT the Röntgen ray is not limited to diagnostic purposes, is shown by numerous clinical reports. As a part of this late literature we note Kümmell's report of sixteen cases of lupus observed at the Hamburg General Hospital. The *séances* were held daily for a period varying from four weeks to several months.

The duration of the application was from 15 to 30 minutes, and the distance of the light from the skin from 40 to 20 cm. With the exception of two or three cases which died of intercurrent disease, and two more at present under treatment, the results were either complete cure or marked improvement. Hahn reports three cases of chronic eczema which resulted in cure under similar treatment, and Albers-Schönberg in the *Archiv. f. Klin. Chirurg.*, publishes a summary of the good results attained by himself and others in cases of lupus and chronic eczema. In these cases no unpleasant results were observed and the resulting scars were smooth and superficial in character. It seems apparent, therefore, that under skillful manipulation the method is comparatively harmless and that many of the cases of dermatitis

reported were the result of ignorant or careless management of the apparatus.

Light of all kinds undoubtedly possesses chemical and other properties, and the same is no doubt true, but in a far greater degree, of the agent in question.

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Book Notices.

TWENTY-SECOND ANNUAL REPORT OF the Board of Health of the State of New Jersey and Report of the Bureau of Vital Statistics, 1898. Trenton, N. J. MacCrellish and Quigley, State Printers, 1899.

The excellent report, besides containing the very full and complete summary of the Society, of the work of the Board for the past year, has embodied in its pages the report of the Bureau of Vital Statistics, a list of the sanitary districts, coroners of N. J., physicians of N. J., report of the bacteriologist, a report on consumption, the sand filter beds at Salem, and a lot of other useful information, which go to make it a model of its kind.

TRANSACTIONS OF THE WYOMING State Medical Society, First and Second Regular Meetings Held at Rawlins and Rock Springs, May and Nov., 1898. Constitution, By-Laws and List of Members. Published by the Society.

Though a new society and the volume before us is not large, yet this Society gives promise of future usefulness and we wish it a hearty Godspeed.

AN EPITOME OF THE HISTORY OF MEDICINE. By Roswell Park, A. M., M. D., Prof. of Surgery in the Medical Department of the University of Buffalo, etc. Based upon a Course of Lectures Delivered in the University of Buffalo. Second Edition. Illustrated with Portraits and other Engravings. Philadelphia, New York, Chicago. The F. A. Davis Company, Publishers. 1899.

It is an evidence of the value of this work, when we take into consideration that the second edition has been called for within a year from the appearance of the first. It shows that the profession, generally, have

been manifesting a deep and genuine interest in this important subject. A complimentary chapter has been added on Iatrotheurgic Symbolism as being quite germane to the general subject of the book.

The "History of Medicine" is really a history of human error and human discovery and it is difficult to tell which prevailed the most during the last 2000 years. The difficulties under which medical science labored may be estimated from the fact that dissection was forbidden by the clergy of the Middle Ages, on the ground that it was impious to mutilate a form made in the image of God. The book should be on the shelf of every progressive practitioner.

A RECORD OF RECENT LEGAL DECISIONS Affecting Physicians, Dentists and Druggists and the Public Health, Together with a Brief for the Prosecution of Unlicensed Practitioners of Medicine, Dentistry or Pharmacy, with a Paper upon Manslaughter, Christian Science and the Law and Other Matter by W. A. Burrington, of the New York Bar. New York, E. B. Treat & Co., 1899.

This little volume will be received with interest by those who are compelled to come in touch one way or the other with the law. It gives many points of value to the medico-legal expert.

THE ANATOMY OF THE CENTRAL Nervous System of Man and of Vertebrates in General. By Prof. Ludwig Edinger, M. D., Frankfurt-on-the-Main. Translated from the Fifth German Edition by Winfield S. Hall, Ph. D., M. D., Professor of Physiology in the Northwestern Medical School, Chicago; Assisted by Philo Leon Holland, M. D., Instructor in Clinical Neurology in the Northwestern University Medical College, Chicago; and Edward P. Carleton, B. S., Demonstrator of Histologic Neurology in the Northwestern University Medical School, Chicago. Illustrated with 258 Engravings, 6½ x 9½ Inches. Pages 11-446. Extra Cloth, \$3.00. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

This book, though starting out small, has now attained such proportions as warrant its use as a text-book on the morphology of the central

nervous system. We find it is divided into two parts, the first one giving the fundamental ideas accepted at the present time, while taking into consideration also "*function*" which was not considered in the earlier editions. The second part realizes finally a plan which, since the beginning of his studies in brain anatomy, the author adopted. His investigation almost completely resting upon his own research in this branch. This edition contains 113 figures more than the Fourth, and of the new ones, 99 are devoted to comparative anatomy. The book stands, to-day, one of the best in this line of study.

TRANSACTIONS OF THE TWENTIETH Annual Meeting of the American Laryngological Association Held in the City of Brooklyn, N. Y., May 16, 17 and 18, 1898. New York. D. Appleton & Co.

As is usual, we find in this volume of transactions a large number of excellent papers which have been read before the annual meeting, notably among which are the President's address by Dr. Thomas R. French, one on the "Enlargement of the Lingual Tonsil as a Cause of Cough," by Dr. Robinson and "Leprous Ulcer of the Lip," by Dr. Wagner and "Sarcoma of the Nasal Septum," by Dr. Clark. Also a report of a number of exhibition cases of more than the ordinary interest, a report of the "Lantern Exhibit," by Dr. Wright, as well as a record of the business meetings, obituary, the constitution and by-laws, list of fellows for 1898, past members and a full index.

THE INTERNATIONAL MEDICAL Annual and Practitioner's Index. A Work of Reference for Medical Practitioners. 1899. Seventeenth Year. New York: E. B. Treat & Company, 241-243 West 23d St. Chicago: 199 Clark St. Price, \$3.00.

With pleasure we hail the appearance of this valuable Annual which for seventeen years has culled from the literature of the world the gist of that which is of value to the general practitioner and student. This volume is no less valuable than its predecessors have been; in fact, it is difficult to refer to a single subject which will not show the latest ideas by the best authorities. It is a book we can heartily recommend.

Society Reports.

NEW YORK ACADEMY OF MEDICINE. SECTION IN ORTHOPÆDIC SURGERY.

Meeting of February 17, 1899.

HYPERTROPHY OF THE TIBIA.

Dr. S. KETCH presented a girl, 4 years of age, whose right tibia was greatly lengthened and thickened, with decided anterior bowing. He had first seen the patient in December, 1898. The epiphyses were thickened, but the enlargement was not confined to them. It was most marked at the middle of the shaft, but included the whole bone, as was seen by the X-rays. Length: right leg, $19\frac{1}{2}$; left leg, $18\frac{3}{8}$; right tibia, $9\frac{1}{4}$; left tibia, $8\frac{3}{4}$. Circumference: right thigh, $9\frac{1}{2}$; left thigh, $10\frac{1}{4}$; right calf, $8\frac{3}{8}$; left calf, $7\frac{1}{8}$. The disease had begun 18 months ago with a small lump on the leg and pain at night and when she walked. This was Dr. Ketch's second patient of this kind. The first one was a girl 11 years of age, who had been presented to the Section in November, 1897, had been operated on for the purpose of shortening and straightening the bone, and had again been before the Section in March, 1898, with resulting improvement and ability to walk about. (See THE NEW ENGLAND MEDICAL MONTHLY February, 1898, p. 80, and September, 1898, pp. 441, 442.—ED.)

The bone had been found to be solid, the cavity being obliterated. Neither of the patients had received any benefit from anti-syphilitic treatment. There was doubt as to the cause of this growth of the bone. It was not improbable that the trouble began in the periosteum. It was a question whether something ought not to be done early in the way of an operation to arrest the process, such as an incision through the periosteum which might at least relieve the tension.

Dr. T. H. MYERS said that this affection was extremely rare. He did not think that any drug could produce a material improvement, though it might prevent further progress of the disease. Such cases were sometimes assumed to be syphilitic for

lack of better information, though no history or symptoms of that infection could be elicited.

Dr. V. P. GIBNEY suggested a linear incision through the periosteum and if that could be done with perfect safety going further by denuding the bone from the anterior surface and shaving off the redundant portion, suturing the periosteum and letting it heal primarily. The growth in length could not be stopped except by attacking the epiphysis, which would be hazardous.

Dr. H. GIBNEY said that in addition to the treatment which had been suggested he would go further and complete the operation, straightening the leg by the removal of a wedge-shaped piece of the bone and maintaining the correct position by plaster-of-paris dressings.

Dr. MYERS thought that incision would only relieve the pain. He would not operate until the child had attained its growth or the disease had stopped.

Dr. G. R. ELLIOTT said that it was of pathological interest that the tibia alone was affected, while the fibula remained normal. There was but little deformity compared with the decided bowing, which had been an indication for operation in Dr. Ketch's former patient, in whom the pathological findings were diffusely distributed throughout the entire thickness of the bone. He asked what effect tying the nutrient artery of the bone would have on the progressive atrophy.

Dr. KETCH said it would probably stop the growth of the bone.

Dr. ELLIOTT suggested the possibility of resulting necrosis.

Dr. A. B. JUDSON said that if the whole limb were affected symmetry might possibly be promoted during the growing period by checking the vascular supply of the larger limb, by bandaging or lacing the whole limb, and increasing the vascular supply of the smaller limb by venous compression. At the same time the functional activity of the one could be lessened and that of the other increased by the use of an ischiatic crutch or other apparatus having the same effect, with a high sole under the shorter limb. But as the diagnosis was absent and the

pathology unsettled he could not suggest a reasonable treatment.

Dr. KETCH said that at an earlier stage some of the operative procedures suggested might have arrested or prevented the abnormal growth of the bone, but, on the other hand, they might have promoted it. He was opposed to the removal of a portion of the bone during the growing period. As the parents of the child desired active treatment an incision might be recommended as likely to stop the pain, which he thought was due to tension.

ENLARGEMENT OF EPIPHYSES.

Dr. MYERS presented a girl 16 months of age whom he had seen for the first time on January 10, 1899. The epiphyses of the radii, femora, tibiae and the entire phalanges of several fingers were enlarged. The joints of the ankles, knees, fingers, wrists and the right elbow were swollen and somewhat restricted in their motions. The enlargement at the ankle joint was peculiar, several of the tarsal bones sharing in it. She walked with difficulty with knees flexed. Flexion of the knees and unwillingness had been observed immediately after an attack of cholera morbus in October, 1898. The knees were kept a little flexed and there was a very slight effusion in these joints. The child did not sleep well, but otherwise seemed to be in good health. Potassium iodide, gr. iv-vii, had been given t. i. d. for a month without improvement. The teeth were not notched. There was no syphilitic history. It was not typical scurvy. The child had been for three months on a general diet including eggs, meat, potatoes and fruit. It was certainly not a typical case of rickets. She had cut teeth early and walked at ten months, the head was well formed and the abdomen not prominent. The diagnosis remained uncertain.

Dr. KETCH said that the obvious feature of the case was a very exaggerated change in nutrition — an overgrowth of some kind, the effect of some not so obvious diathetic caused. He had seen localized changes in scorbutus, which were very similar.

Dr. V. P. GIBNEY said that the changes were similar to those seen

in chronic rheumatoid arthritis which he had repeatedly seen in typical forms in children 7 and 8 years of age, and he did not see why it should not attack a child 16 months old. This, however, would not explain the growth of the long bones and phalanges. His first thought was of scorbutus, but the condition would have disappeared with the child on the diet stated. Syphilis could be excluded. If pushed for an opinion he would say it was a case of multiple bone tuberculosis, a condition which could be less easily excluded than any of the others mentioned. The boggy feeling of the joints, the fact that there was effusion in the joints, and the statement that flexion of the knees and an unwillingness to walk had followed an attack of cholera infantum all supported the view that it was an instance of bone tuberculosis. He would raise the question whether synovitis was not one of the earliest signs of tuberculosis in a child. He advised putting the child in a wire cuirass and keeping the limbs extended. It was not good to allow the child to walk.

DR. KETCH said that primary synovial tuberculosis was rare in children.

DR. JUDSON had noticed the contraction of the knees and hips, but thought it was not the result of the reflex muscular action of joint disease, and that the fact that the contractions were nearly symmetrical pointed to a more general cause than tuberculosis of the joints affected. He did not think that synovitis was an early incident of osteitis and that primary synovitis could be differentiated by the absence of the usual signs of osteitis, which were muscular atrophy and reflex action and a prolonged history of inconstant lameness and pain. Synovitis should not be considered as liable to run into osteitis, although practically it was well to relieve a synovitic joint from weight bearing.

DR. KETCH said that he had rarely seen synovitis as an early sign of tuberculosis.

DR. V. P. GIBNEY said that the focus of diseased bone might suffer a traumatism and thus cause an extension of the process and give rise to this outward manifestation. He

recalled a case seen twenty years ago. The child's knee was full of fluid. It was thought surely to be synovitis and a glowing prognosis of recovery in a few weeks was made, but after 6 or 7 years' treatment recovery took place with a stiff knee. Primary osteitis with secondary synovial distension occurred before the gross signs of the osteitis, which called the attention of the practitioner to some trouble in the knee. At this stage the trouble could be cured.

DR. ELLIOTT said that fluid in a joint immediately after a traumatism pointed clearly to a synovitis directly due to traumatism. If tuberculosis followed it resulted from a further injury to the bone itself, which made a proper nidus for the tubercular growth. In other words a dual injury and the fluid in the joint was entirely distinct from the true tubercular lesion and in no way connected with it. The later tubercular development might delay the absorption of the primary synovial excess, and thus the latter might come to complicate the tubercular joint.

DR. MYERS had seen effusion early in tubercular joint disease, but did not consider it of diagnostic value. In spite of the fact that the patient had had apparently an anti-scorbutic and anti-rachitic diet he could not help thinking that the trouble was due to one of these diseases rather than tuberculosis. The child was not very sick. The principal changes were in the epiphyses and phalanges and seemed to him to be due to some form of nutritional disease. The congested epiphyses could fully account for the pain and tenderness, but he would adopt the suggestion made and protect the joints by keeping the child quiet.

CASES OF COXA VARA.

DR. MYERS also presented a boy 8 years of age who had waddled, and was walking worse every year, since he began to walk. His muscles were strong. A certain rigidity of all the muscles of the lower extremities made examination somewhat difficult. The motions of the hip joints especially flexion and abduction were somewhat limited. There was no

dislocation, but the neck of the femur was seen in the skiagram to be bent down as in coxa vara. The diet had been very good. The boy was a little bow legged and flat-footed.

DR. H. GIBNEY found no shortening and trochanters but slightly above the line. He thought the waddling might be due to flat feet.

DR. V. P. GIBNEY said that the radiograph showed forward rotation and a little bending backwards of the femoral neck at its junction with the shaft.

The opinion was expressed by several speakers that the boy had coxa vara in a mild and not strictly typical form.

DR. ELLIOTT thought that the condition dated from early rachitis in all probability. The picture was a logical one and the femoral neck had changed simultaneously with the bowing of the legs, both having been more or less plastic.

DR. KETCH said that the traces of rachitis were obvious. Coxa vara was sometimes made to include cases that were not dependent on bending of the bone. Some cases were due to deviations caused by abnormal epiphyseal growth resulting in a change in the angle of the neck of the femur. On the other hand the peculiar gait of coxa vara was not infrequently attributed to knock-knees or bow-legs.

DR. JUDSON said that coxa vara might be considered to mean an abnormal or varous relation of the neck of the shaft caused by lesions of different kinds, all of which were not yet recognized.

DR. V. P. GIBNEY said that in coxa vara we had found one new disease or condition to rule out in our study of hip disease. Many cases of "hip disease" in adolescents which recover and have relapses, but never get very bad, having from one-half to three-fourths inch shortening, were really cases of coxa vara.

DR. KETCH presented a boy, aged 11 years, who had had a limp (left leg) in winter but not in summer for three years. Pain and inability to walk on rising disappeared entirely in the afternoon. There had been no history of rickets or rheumatism. Abduction was limited, especially in

flexion. Outward rotation abnormally free, trochanter $\frac{1}{2}$ in. above the line, no atrophy. R. 28, L. 27 $\frac{5}{8}$. The skiagraph showed a change in the angle of the neck.

TREATMENT OF COXA VARA.

DR. JUDSON suggested mechanical means for permitting locomotion while the affected part is relieved from the weight of the body as long as the bone was in a growing or plastic state.

DR. V. P. GIBNEY said that when the affection was single, good results could be obtained from the use of the hip-splint. He saw no objection to the wearing of a jointed splint for some months, affording, not absolute, but modified, protection, enough to shut out traumatism.

DR. H. GIBNEY said that the ischiatic crutch for this purpose was easily adjusted and comfortably worn and allowed the limb to hang free.

DR. MYERS said that when both femora were affected mechanical protection was attended with difficulties, and it was not easy to keep the adolescent patient, like the one he had presented, quiet.

DR. JUDSON suggested the use of a bicycle.

DR. KETCH in such a case would improve the general nutrition and prepare the parents for a long wait.

PAIN RELIEVED BY TRACTION.

DR. MYERS related the history of the patient, 26 years of age, who had suffered 5 $\frac{1}{2}$ years from rheumatism in the ankles, neck, shoulders, elbows and wrists and the right hip. For the first year improvement had followed massage and medical treatment. For the past 4 $\frac{1}{2}$ years the right hip had gradually become stiff and painful in walking. When first seen by Dr. Myers in February, 1898, there was some spasm, but no shortening. Motion of hip: flexion, 16 deg.; abduction, 10 deg.; external rotation, 10 deg. A short traction hip-splint was at once applied and is still worn. There had been no pain since June, 1898, and the man considered himself greatly improved.

DR. KETCH recalled the case of a man in whom the terrific pain of a sarcoma of the femur had not been relieved by powerful narcotics, but

had been relieved for a time by traction made with a long hip-splint and afterwards, as more convenient, with a short splint.

FRACTURE OF THE NECK OF FEMUR IN AN INFANT.

DR. MYERS showed a specimen of fracture of the neck of the femur in a child 8 months old. A large amount of callus was present within and without the periosteum. There was a lateral displacement of the lower fragment inward one-third the diameter of the bone. No history could be obtained except that the injury must have occurred before the fifth month.

A NEW PELVIC REST.

DR. MYERS also showed a pelvic rest especially well suited for the application of spica bandages which included the trunk and thighs, as it could remain in place until the spica was fully applied and could then be easily withdrawn. It was made of a piece of sheet steel $\frac{1}{4} \times 1 \frac{1}{2} \times 14$ in., bent upon itself so as to form three sides of a square. The ends were hammered out so as to form oblong planes about 3 inches broad and 5 inches long. When in use one of the planes rested upon the table and the other supported the sacrum, while the upright connecting them was directed towards the feet.

—:o:—

EXTRA-UTERINE PREGNANCY WITH REPORT OF CASE.—G. D. Nutt (*Penn. Med. Jour.*) and others who commented upon his article are of the opinion that every case of ectopic gestation is a case for operation. For even should the clot become absorbed there would result more inflammatory changes than from operation. Then, too, there is always the danger of degeneration of the clot and infection of the patient. The use of electricity in the treatment of these cases does not seem to meet with approval. The two methods of operating, *i. e.*, abdominal and vaginal, have each their advocates. When adhesions are extensive, or where a clear operation is desired the abdominal operation appears the more rational.—*Ex.*

Abstracts.

INDICATIONS FOR THE MEDICAL AND FOR THE SURGICAL TREATMENT OF GALL-STONES.—Hans Kehr (*Munchener Med. Woch.*) gives the indications which he considers should determine medical or surgical treatment in cases of cholelithiasis. His opinion is of especial value, as he has done some 364 laparotomies for various forms of this affection and has been, in his own person, a sufferer from gall-stones.

The Carlsbad cure—restricted diet, careful regimen, exercise and thermal waters—is recommended: 1. For acute obstruction of the common duct if without fever and accelerated pulse. In that case operation is to be considered. 2. Inflammation of the gall-bladder—with or without jaundice—when not too intense or frequent. 3. Frequent colic with passage of stones. 4. In cases of obesity, diabetes, gout, or those in which anæsthetics are contraindicated. 5. For those individuals that have been operated upon.

The administration of such drugs as are supposed to be cholagogues—olive oil, glycerine, sodium, salicylate, bile acids, etc.—is proper in obstruction of the common duct, but not in disease of the gall-bladder. The indication here is to subdue inflammation.

Operation is indicated (1) in acute inflammations in and about the gall-bladder; (2) when adhesions from former attacks give rise to symptoms; (3) for chronic occlusion of the common duct; (4) for chronic closure of the cystic duct; (5) in cases of inflammation of the gall-bladder, becoming progressively worse in spite of treatment; (6) purulent inflammation of the bile passages and liver abscess; (7) for perforation of biliary passages—with peritonitis, and (8) for morphinism resulting from gall-stones.

In any event, frequent attacks of pain furnish an indication for exploratory section.—*Philadelphia Medical Journal.*

Puncture or aspiration have frequently been advised for diagnosis or treatment of hydatid cysts, empyema of the gall-bladder, liver ab-

scess, etc., but some cases reported by Parker (*British Medical Journal*) emphasize the dangers of such a course. The life of one of his patients was nearly sacrificed through a general peritonitis resulting, in all probability, from a diagnostic exploratory puncture made twenty-four hours before, and it is a matter of record that a very considerable proportion of cases submitting to puncture prove fatal. His experience again calls attention to the fact that extensive liver abscess may develop without elevation of temperature.—*Progress of Medical Science.*

DIGESTION OF STARCHES.—When it is considered that more than two-thirds of the daily food of mankind consists of starch, it becomes at once obvious that the same proportions must be observed in all discussions of dyspepsia. That which will assist in the assimilation of proteids will not be found of assistance in the assimilation of starch elements of the diet; in other words quite two-thirds of all cases of dyspepsia require the exhibition of a different remedial agency than the remaining one-third. For this larger class of failures to assimilate the food the value of diastases has been under careful investigation. The most recent of such examinations has lately been conducted in the chemical laboratory of Tuft's Medical School, by Dr. A. E. Austin, who has reported his results in the *Boston Medical and Surgical Journal* of April 6. Dr. Austin's researches were into the nature and effects of Taka-Diastase and were conducted along both chemical and physiological lines.

Taka-Diastase is an isolated diastatic ferment developed in the culture of the fungus *Eurotium Oryzæ* on sterilized wheat bran, from which the diastase is extracted by water and precipitated with alcohol. As thus obtained it exists as yellowish-white powder with a slightly nutty taste, but no odor; it is non-hygrosopic, yet readily dissolves in water with little or no sediment. It is so strongly diastatic that it will convert more than one hundred times its weight of starch into sugar within ten minutes. It may be noted that

it is the discovery of the Japanese chemist, Dr. Jokichi Takamine.

Dr. Austin's researches were addressed to these seven important points: 1. The digestion of starch by Taka-Diastase in a neutral medium, the relative amounts of each, the time required for complete digestion. 2. The action of free hydrochloric acid on such digestion. 3. The action of free organic acid on such digestion. 4. The effect of free hydrochloric acid on starch digestion in the presence of albuminized hydrochloric acid. 5. The influence of hydrochloric acid on starch digestion in the presence of both animal and vegetable albuminoid foods. 6. The action of hydrochloric acid of dog's gastric juice on starch digestion in a dog's stomach in the normal digestion with a dose of Taka-Diastase. 7. The influence of hydrochloric acid of human gastric juice on starch digestion in the human stomach, both with and without Taka-Diastase.

The details of these experiments are most instructive and interesting, but to present them would occupy too much space. It will be sufficient to recount the results at which Dr. Austin has arrived in each of these lines of inquiry, which establish the following facts:

1. In a neutral or slightly acid medium Taka-Diastase digests starch with great rapidity, the rapidity being directly in proportion to the amount of Taka-Diastase used; in one hour it is capable of digesting 300 times its own weight.

2. Such digestion is accelerated by a small quantity of free hydrochloric acid, but excess of the acid tends to retard and arrest the process.

3. For all practical purposes such digestion is not impeded by organic acids; in fact small quantities of organic acid enhance the digestion.

4. The presence of albuminized hydrochloric acid seems to lessen the power of free hydrochloric acid to hinder diastatic digestion of starch.

5. Animal and vegetable albuminous foods combine with free hydrochloric acid, rendering it inert; the acid thus combined has no power to hinder diastatic starch digestion.

6. In the stomachs of dogs when albuminous and starchy foods are

given together no free hydrochloric acid is found at the expiration of one hour, and the starchy foods have by that time been perfectly digested.

7. In the human stomach, when an ordinary meal has been taken, the albuminous food matter combines with the hydrochloric acid of the gastric juice as fast as it is formed, at least for the first hour; such albuminized hydrochloric acid has no retarding effect on the digestion of the starches, the diastatic digestion of the starches is practically completed within that period.

These conclusions show the distinct advantages of the the Taka-Diastase in all cases where dyspeptic conditions are due to the failure properly to assimilate the starch constituents of the meal.

SUDDEN PARALYSIS OF THE CILIARY MUSCLE OF ASTHENOPIC ORIGIN.—Jacqueau (*Lyon Mtd.*) reasoning on the basis of excessive ciliary spasm in uncorrected hyperopia, states that this strain sometimes leads to sudden paralysis of accommodation from complete exhaustion of ciliary innervation. We should be on the lookout for such a cause in cases of sudden failure of accommodation without suspicion of cranial or spinal disease. Refraction under additional cycloplegia by atropine, if possible, is the first step in treatment. Rest and strychnia are also indicated.—*Ex.*

ACTUAL AND THEORETICAL FACTS OF IMMUNITY.—(*Deutsche Med. Woch.*) Behring maintains that the true significance of the word immunity has not yet been thoroughly established. Frequently immunity is regional in character, that is to say, an animal is immune to a poison introduced through the stomach or subcutaneous tissues, though it may readily succumb to the disease when the poison is inoculated into the brain. Still it is proper to say that an animal is immune when it is protected against the action of such a dose of poison as is destructive for other animals under a like mode of application. The reason for the harmlessness of many poisons, such as snake poisons, when taken into the stomach, is to be found

not in the destructions of these poisons in the stomach, but in the fact that albuminous substances pass only with difficulty through an intact epithelial wall. The intact skin-surface acts in a like manner as a protective wall against the introduction of poisons. An interesting phenomenon of immunity is observed in the case of certain animals, immunized to tetanus when inoculated through the blood, but which perish when inoculated into the brain. This immunity against hæmatogenous infection while the cerebral susceptibility is preserved is due to the fact that the antitoxin can only permeate the walls of the blood vessels to a very slight degree. If the blood vessels become injured, the poison introduced into the brain is harmless. Regarding the hereditary transmissibility of immunity, Behring believes that a true histogenic immunity has never been transmitted. Hæmatogenous immunity, that dependent on the presence of antitoxines in the blood, is transmissible, but only so far as the antitoxin passes from the mother to the foetus in the blood or milk. A father cannot transmit immunity. Behring distinguishes two kinds of immunity, an antitoxic or passive immunity, produced by the introduction of ready-made antitoxin and an active or isopathic, induced by primary treatment with the toxin. There is but little difference between the resisting powers of animals immunized isopathically and those treated with antitoxin. There is no evidence that these animals possess any histogenic immunity. In all probability the immunity is dependent on the presence of the antitoxin in the blood. Experiments show that the susceptibility or the non-susceptibility of any species of animal is an unalterable thing. The few exceptions to this rule can be explained on the theories of variation, selection, accommodation and heredity. There are two kinds of poisons, humoral and cellular. Isopathic immunization is possible only with the latter class, those which have an affinity for the cells. The cellular poisons are of two classes, general and specific. As an example of the general we have carbolic acid, of the specific, the selective activity of the tetanus

poison for certain cell groups. Iso-pathic immunity against general cellular poisons is scarcely possible. Cellular poisons, again, may be divided into those readily dialyzable and those not readily dialyzable. It is probable that only those toxins which are dialyzable with difficulty can be used for immunizing purposes. Improvements in the technique of immunization seem to have as their object the enlargement of the molecule of the toxin so that it will become less readily dialyzable. It is this difficult dialyzability that helps to explain the incubation period.—*Yale Med. Jour.*

ETHER PNEUMONIA.—J. M. Andras in a paper before the American Medical Association, presents some interesting data on this subject. Because of its insidious development, many times the diagnosis resting entirely upon the physical examination, he thinks it is not infrequently overlooked and so the statistics regarding its frequency may be inaccurate. In 12,000 major operations the percentage of pneumonia was .23. The same predisposing causes prevail here as in the ordinary pneumonia, viz., winter season, alcoholism, exposure to cold and wet. Disease of the upper respiratory tracts favor the development of an aspirative pneumonia.

In a series of gynecological operations, the percentage of pneumonia was higher than in other operations, probably due to the longer anaesthesia of the gynecological cases.

The pathology of ether pneumonia is very similar to that of secondary pneumonia; frequently there is a mixed infection.

Andras reports thirty cases in his paper, in only one of which was the invasion of the disease marked by a chill. Pain, dyspnoea and cough were not prominent symptoms in any of the cases. The fever was not so high as in ordinary pneumonia and its termination was by rapid lysis rather than by crisis in thirteen of the thirty cases.

He emphasizes the importance of a physical examination of the chest after etherization whenever there is a sudden rise of temperature, especially if associated with pain or cough,

and among prophylactic measures he suggests:

1. Use of minimum amount of ether.
2. Rapidity of operation.
3. Maintaining proper temperature of patient, operating room and patient's room.
4. Removal of any disease of respiratory tracts before etherization and the use of antiseptic sprays to upper air passages just before giving the ether.
5. Removal of mucous accumulations during etherization.—*Progress of Medical Science.*

SCHLATTER'S CASE OF REMOVAL OF THE STOMACH. — Schlatter (*Lancet; Internat. Med. Magazine*) communicates his further observations on his case of complete removal of the stomach. The patient's weight has increased eighteen pounds and a half since the operation. Her general condition is excellent, and she is able to partake of ordinary diet without any inconvenience other than a feeling of pressure in the epigastrium and in both hypochondriac regions after a hearty meal. A quantity of milk amounting to ten fluid ounces and a half is quite capable of producing this feeling of pressure. Her digestive capacity can be judged from the following diet lists: Jan. 17th: Milk, thirty-three fluid ounces; coffee, thirteen fluid ounces; three rolls; three eggs; soups, three fluid ounces and a half; fried sausage, four ounces; stewed apples, seven ounces; whortleberries, three ounces, and claret, seven fluid ounces. February 5th: Milk, eleven fluid ounces and a half; three rolls, three eggs; soup, four fluid ounces; sweetbreads, ten ounces and a half, cauliflower, seven ounces, and claret, seven fluid ounces. March 4th: Milk ten fluid ounces and a half; coffee, seven fluid ounces; soup, four fluid ounces; roast veal, four ounces; carrots, fourteen ounces; four rolls, and claret, seven fluid ounces. Her animal food varied between roast veal, Vienna steaks, chops or cutlets, beefsteak, fried sausage, brain, sweetbread and fowl. Analyses of urine and faeces showed a diminution of chlorides and nitrogen, indicating an abundant ab-



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sorption of albumin. Microscopical examination of the feces revealed an entirely normal condition. There were no putrefactive changes present, proving that the entire absence of the gastric juice, with its HCl, is without any influence on the extent to which putrefactive decomposition is developed in the intestine.

A NEW ALBUMEN PREPARATION.—Schreiber and Waldvogel (*Dent. med. Woch.*). Sanose is a mixture of albumen, consisting of 80 per cent. casein and 20 per cent. albumose. It has properties very similar to mother's milk and is digested at 40° by trypsin, or pepsin and hydrochloric acid. According to artificial digestive experiments, it is to be preferred to nutrose and is about equal to eu-casin. It is a white, odorless and tasteless powder, which can be stirred up into an emulsion and given with milk, but preferably with metrol. *Cent. f. inn. med.*

THE WORKING TOOLS OF THE CRAFT. Coincident with the onward progress of the medical art has been the advance in our knowledge of the cause of disease. As the practice of medicine and surgery has gradually but surely emerged from the darkness of charlatanism and empiricism and approached more nearly to the dignity of a science, the pressing demand for better facilities and better "working tools" has been met alike by the skillful instrument maker and the modern expert pharmaceutical chemist. The surgeon of to-day has at his command a full armamentarium of ingenious instruments of precision, cunningly devised for certain specific purposes and upon which he can confidently depend. The modern physician also has been furnished with therapeutic instruments of precision, originated by the physiological chemist as a result of the close study of Nature's laws and elaborated and perfected by expert pharmaceutical skill. Contrast for a moment the "working tools" of the physician of a hundred years ago with those of the practitioner of to-day; the bolus and nauseous decoction as against the dainty tablet and

the palatable elixir. Up to this point the modern surgeon possesses no advantage over his medical confrère as far as his "working tools" are concerned; but here the parallel ceases. The surgeon, when he needs a new scalpel for an important operation, examines the stock of a reputable dealer and personally selects an instrument of the best quality obtainable. He sees it, handles it and assures himself that it is well made and properly tempered. If, perchance, the knife is not as represented he soon discovers it, and promptly discards it for one which is more satisfactory and reliable. The surgeon not only *personally selects*, but *personally employs* his instruments, and, therefore, cannot be deceived in them. But how about the equally important "working tools" of the physician, *i. e.*, the remedies which he orders for his patients? After a series of careful clinical experiments with various remedies of a certain character, he comes to the deliberate conclusion that one particular preparation gives him the best therapeutic results, and that it will hereafter become one of his trusted "working tools." Take for instance Pepto-Mangan "Gude," the value of which almost every modern practitioner is now familiar with. The physician has learned from experience just what this particular remedy will accomplish; he knows its advantages, limitations, indications and dosage, and prescribes it in properly selected cases, with full confidence in its action and effects. Just here, however, the physician *loses control of his "working tool,"* unless he is positively certain that his prescription will be filled exactly as specified. It is, of course, manifestly impossible for the busy physician to personally follow up every prescription in order to assure himself that some inferior and more or less worthless substitute is not dispensed in place of the article prescribed, and he must, therefore, adopt some other means to prevent this reprehensible practice. There are three ways in which the physician can protect himself and his patient against this unwarranted, inexcusable and dishonest interference:

1. Let him be certain that his prescriptions are filled only by pharma

cists known to him to be above such disreputable catchpenny practices.

2. Specify plainly and unmistakably the particular preparation desired.

3. When possible order an original, unbroken package.

We feel strongly about this very common and nefarious practice of substitution, which is injurious alike to the welfare of the patient and the reputation of the physician, to say nothing about the injustice to the reputable manufacturers, who have spent brains, time and money in putting valuable and eminently eligible "working tools" into the hands of the profession. — *Dominion Med. Mon.*, Toronto, Canada, March, 1899.

ECLAMPSIA.—B. S. Pollak (*Penn. Med. Jour.*) in discussing the treatment of eclampsia advises measures to secure diaphoresis and catharsis, and to control convulsions for which chloroform and chloral have shown best results. The use of veratrum viride has reduced the mortality, according to Jewett, to 18 per cent. The following mortalities were recorded in the largest American maternities in 1892: Bellevue Hospital, New York, 46.1 per cent.; The Phila. Lying-in Hospital, 100 per cent.; The Boston Lying-in Hospital, 31.3 per cent.; The Baltimore Lying-in Hospital, 60 per cent.; The Montreal Hospital, 50 per cent. Average mortality of 46 per cent.—*Ex.*

UREA AS A DIURETIC.—Ascites due to alcoholism and in one case to Bright's disease, has been treated by Sabrazes and Dion with urea as a diuretic. The first case was in a man, sixty years old, who had suffered from alcoholism, malaria and saturnism. Two years before admission to the hospital he commenced to suffer from malaise and from pain in the hypochondriac regions. He became emaciated, and at the same time he noticed distension of the abdomen. Physical examination disclosed the presence of fluid in the abdomen, slight increase in the size of the spleen, and apparent decrease in the size of the liver. The man was placed upon a rigid diet, and the urine

carefully analyzed. The amount of urea was somewhat diminished, but otherwise there was no abnormality. For one month this diet was continued, when 5 gr. of urea were administered daily, the dose being gradually increased until 20 gr. were given. The amount of urine excreted increased rapidly to three liters a day. The urea was then discontinued and there was a considerable decrease in the quantity of urine. The drug was given again with marked increase in the amount of urine and rapid improvement in the ascites. The second patient, a man 71 years old, had been perfectly healthy, but had been a habitual consumer of alcohol. Nine months before coming under observation he had had a severe "cold" and became emaciated. From this time his abdomen began to swell, and it was finally enormously distended, thirteen litres of fluid being withdrawn. He was placed upon a rigid diet and two days later it was necessary to puncture the abdomen again, twelve liters of fluid being now withdrawn. Urea was administered and caused an immediate increase in the amount of urine, from 600 to 3000 cc. per day. Then, in spite of the continuance of the medication, the urine decreased to about 800 cc. Nevertheless there was considerable improvement in the man's condition. The third patient, a man 51 years old, had been a habitual drunkard. Some time before coming under observation heart disease had been diagnosticated, and later there was distension of the abdomen. The man was placed upon a restricted diet, but it was impossible to obtain physiologic equilibrium. A considerable quantity of ascitic fluid was withdrawn, containing a large proportion of urea. Urea was then administered by the mouth, but, although it caused a slight increase in the daily excretion of urea, it did not act as a satisfactory diuretic, even when given hypodermically, the only indication of its efficiency being a decrease in the daily amount of urine when it was discontinued. The fourth patient, a man 47 years old, suffering from some kidney disease, was given urea in addition to a restricted diet. Immediately the quantity of urine increased markedly. The increase,

however, was not permanent, considerable oscillation taking place in the curve. Of the four cases reported pronounced therapeutic effects were produced by urea only in the first. In the second there was slight improvement. The last two cases were not benefited in the least. It is concluded, therefore, that urea is only effective in benign forms of atrophic cirrhosis; that when the oliguria is persistent and does not yield to ordinary diuretics, urea will be of no value; and that any sign of the imperfect elimination on the part of the kidneys indicates that urea will be of no service. The action of urea is to increase the tension of the blood, and, therefore, renal activity. *Merck's Archives.*

ACUTE NEPHRITIS IN CHILDREN.—Dupeu (*Jour. de Méd.*) has collected a large number of cases of acute nephritis in children. He finds that the affection is in reality more common than is supposed, but, fortunately, the disease is much more hopeful in its prognosis than in adults. The author looks upon measles as a more frequent cause than is supposed by some authors, for it is definitely stated by some that it is extremely rare in this condition. Irritation and absorption from the skin would seem to be a cause of acute nephritis; thus blistering, the application of turpentine, carbolic acid, etc., may produce nephritis and it has been known to follow burns, severe electrization, too hot baths, and inflammatory conditions, as eczema, erysipelas, impetigo. Chicken-pox has also been observed to cause nephritis, as first pointed out by Henoch. Others consider it exceptional, but the author quotes Descroizille as stating that the most frequent complication of varicella is nephritis. These cases all seem to terminate favorably. Post-vaccinal nephritis is also described and acute inflammation of the kidney may even follow tonsillitis and a case is quoted in which a recurrent tonsillitis was always accompanied by acute nephritis. Lastly, the author states that nephritis may be the result of ordinary gastro-intestinal intoxication, more particularly when there is dilatation of the stomach. This has

been observed in children as young as eleven to sixteen months old, fed by the bottle, and in whom vomiting and diarrhea were prominent symptoms. In these cases there is very marked abnormal fermentation taking place with the production of more or less toxic products, which, when absorbed, are competent to produce nephritis. The duration of these varies from two to four weeks, and may be accompanied by all the usual signs of Bright's disease.—*Archives of Pediatrics.*

SIXTEEN "FRIABLE" PILLS SUCCESSFULLY TRAVERSE THE ALIMENTARY CANAL.—After reading the article on friable pills in the last issue of the *Notes*, I thought it might be of interest to you to hear of an experience I had in the past summer. I had a patient—a lady about 40 years old—who had remittent fever. I gave her quinine in the form of two-grain friable pills. She did not improve and I increased the dose. On the third day there was a free watery discharge from the bowels. Her husband in removing the vessel had his attention called to something round in its contents, and he fished out and had for my inspection, when I made my visit to the sick woman, sixteen friable pills. Some of them were nearly half worn away, and from that they were in nearly all stages back to those which showed traces of the pink sugar coating. *Pierson, Pharmacal Notes.*

SCHLEICH'S GENERAL ANESTHESIA NOT A SUCCESS.—His personal experience in a large number of cases leads H. Rodman (*Med. Rec.*) to look unfavorably upon this new anesthesia mixture, although the favorable reports which followed its introduction into this country had led to the hope that it would obviate some of the unpleasantness and dangers attending the administration of ether or chloroform. He has not found it less free from danger than either of the other anesthetics; has seen dangerous cyanosis and syncope. Has found the same harmful effects upon the lungs and kidneys and proved it to be a respiratory and cardiac de-

pressant. Its only advantage is that it is pleasanter to inhale. It is not safe in heart lesions, for it was shown that a sound heart can be so depressed by its action as to greatly endanger the patient's life. These poor results have caused the withdrawal of the mixture almost entirely from the hospital where the results were observed.—*Int. Med. Mag.*

TWO CASES OF TETANUS SUCCESSFULLY TREATED WITH ANTITOXIN.—Patteson (*The Dublin Journal of Medical Science*) reports two cases of tetanus in which the symptoms became very alarming and where the use of antitoxin seemed to have been the cause of the ultimate recovery. The author says that he is aware that the cases are open to the obvious criticism that they belong to the type of tetanus which would recover if left to the *vis medicatrix naturæ* alone. But he answers that he has seen cases with no more pronounced symptoms rapidly run to a fatal termination, and one is not justified in standing idly by while a remedy full of promise lies ready at hand.

Whether the future will justify the hopes based on serum therapeutics can only be determined by a careful record of cases, and all should be reported, and in this direction lies at present our hope of combating some of the most terrible infective ills that humanity can ever suffer from.—*Ex.*

ETIOLOGY OF YELLOW FEVER.—Frederick G. Novy (*Med. News*) gives his conclusions as to the etiology of yellow fever as follows:

1. The Havelburg and the Sanarelli bacilli are distinct.
2. The Havelburg bacillus belongs to the colon group.
3. The Sanarelli bacillus undoubtedly belongs to the typhoid group.

Neither the Havelburg nor the Sanarelli bacillus is the cause of yellow fever. The etiology of this disease is yet to be worked out. The microbes of Havelburg and Sanarelli are to be placed in the already long list of disproved causes. The negative bacteriological results, taken in connection with the epidemiological facts observed in this disease, would

seem to indicate that the cause will not be found in our group of bacteria. It is more than likely that the germ of yellow fever, as well as those of small-pox, measles, hydrophobia, etc., belongs to a group of organisms smaller than our bacteria, and as yet unknown. The recent work of Roux and Nocard on the microbe of pleuropneumonia already proves the existence of organisms smaller than the "infinitely small" bacteria.—*Modern Medicine.*

NUTRITIVE VALUE OF SUGAR.—The *Lyon Médical* quoting *Médecine moderne* says that there has recently been made in the German army during the manœuvres a series of interesting experiments upon the nutritive and tonic properties of sugar.

Ten men were chosen from each company from among the least vigorous as subjects of experiment, and ten others were used as checks. The former received at first ten lumps of sugar daily; then the daily ration was progressively raised to ten and twelve lumps. The results were as follows: During the manœuvres the weight of the men dieted with sugar increased in a greater proportion than that of the others. They were at the same time in better health and more vigorous than prior to the experiments. On a march a lump of sugar appeased both hunger and thirst. Fatigue and insolation were easily combated by the aid of this article.

In consequence of these experiments, M. Leitenstorfer, under whose direction they were made, proposes to introduce sugar into the military dietary in three different ways:

1. As a supplementary article to improve the daily ration of the soldier.
2. As an integral part of the reserve supplies and provisions of strongholds, hospitals and ships.
3. As a temporary ration to strengthen the soldiers and to sustain their vigor while on the march.

The *Revue Scientifique* which gives a *résumé* of the experiments made by M. Leitenstorfer, adds that sugar appears to be indicated to replace alcohol or wine under the various conditions when it is commonly considered

desirable to include the latter in rations. Sugar, it says, affords, in short, the same stimulation as alcohol, but without danger. It has, moreover, the incontestable advantage of being a muscular aliment of the first rank, combating and at the same time preventing fatigue.—*N. Y. Med. Jour.*

FEVER FROM COITUS DURING THE PUERPERIUM.—In a recent issue of *Woman's Medical Journal*, Dr. F. H. Lee reports a case of this character. The case referred to was a V-para in whom each confinement had been followed by chills and fever about the fifth day. In the confinement for which Dr. Lee attended the patient the temperature and pulse were normal until the fifth day, when the patient began having chills in the morning. The temperature was 103.5°, the expression anxious, the abdomen slightly distended and tender, and the patient complained of headache. On inquiry it was ascertained that the patient had had coitus on the night of the third and the morning and night of the fourth day—thrice in thirty-six hours. Interdiction of coitus reduced the temperature and the patient made a good recovery thirteen days after confinement. On inquiry it was ascertained that coitus had been indulged in on the third and fourth days after each confinement, the chills and fever following.—*Charlotte Med. Jour.*

A CURIOUS POCKET PIECE.—In the *New York Medical Journal* of February 4, 1899, Dr. William S. Gottheil describes a case in which a woman carried a piece of her own skull in her pocket for years for "good luck." She applied for treatment for a different affection, and it was discovered incidentally that a syphilitic periostitis had begun again around the scar left by the ulceration from which her piece of bone had come twelve years before. As in the present case, she had not at that time attached sufficient importance to the matter to consult a physician about it. The sequestrum, of which she was quite proud, was an ovoid piece of bone measuring $2\frac{1}{4} \times 2$ in-

ches, and was composed of two adjacent portions of the two parietal bones, the sagittal suture in the middle showing beautifully. Its upper convex surface showed the outer table of the skull intact. The under concave surface was composed mostly of cancellous tissue; but all along the middle line, at the suture, the inner table was present, showing that at that place the entire thickness of the skull had been lost.

Apart from its curiosity, the case is of interest as showing the very extensive destruction of important organs that can take place in syphilis without systemic reaction or much personal inconvenience. The entire thickness of the skull had been destroyed, and the meninges necessarily exposed; yet the inflammation had not spread to those membranes, and the patient had hardly considered herself sick.

DRY CATGUT STERILIZATION.—Dauber gives as the method of Professor Tscherning (Copenhagen) for the dry sterilization of catgut, one which is in effect that of Dr. E. Boeckman, of St. Paul, and very similar to that employed by several American manufacturers of surgical supplies. It is as follows: The commercial gut as it comes from the manufacturer is placed in the trays of a sterilizer between sheets of cellulose paper. It is then heated for an hour at 150 deg. F. and for a second at 280 deg. F. It is now sealed in cellulose-paper envelopes and these in larger ones of the same material and replaced in the sterilizer for another two hours at 280 deg. F.—*Lancet.*

The ready portability of this gut is an advantage which is, however, in the opinion of many surgeons, more than overcome by its stiffness and tendency to curl up into spirals.—*Progress of Medical Science.*

DISUSE OF THE BED-PAN IN TYPHOID FEVER.—H. C. Drury, M. D., F. R. C. P. I., observes that there is no doubt that to many people the use of the bed-pan is exceedingly irksome.

The bed-pan is seldom used, even in typhoid fever, in Cork Street Hospital. There is a night-chair beside

every bed, and as long as the patient is able to get up to this he is allowed to do so. The nurse gives him assistance and covers him up. Only when unable to get out of bed is the bedpan used; then it is found in many cases to be unnecessary, as by that time the patient generally passes all evacuations unconsciously.

The arguments in favor of this practice are:

1. Less annoyance to the patient.
2. More complete evacuation of the bowel, and, therefore, less frequent disturbance.
3. The more natural position causes less straining, and, therefore, really less risk of either hemorrhage or perforation.

A weak patient cannot fall off the chair on account of the strong, high arms, which give him comfortable support while he sits up.

It will, of course, be objected that this is a ready way of courting disaster, either by hemorrhage, perforation or syncope. Dr. Drury states that this has not been his experience. *Med. and Surg. Rev. of Revs.*

A DETAIL IN ABDOMINAL INCISION. Dr. Henry Scherck (*International Jour. of Surgery*) says that in performing laparotomy he has noticed that the abdominal incision having been made, the constant introduction and manipulation of the fingers through the abdominal incision causes the peritoneum to become separated, to a greater or less extent, from the muscular tissue. Appreciating the possibility of several complications arising from this condition of affairs, the idea suggested itself to him to introduce a stout ligature through the center on either side of the incision; about half an inch from the margin of the wound; this ligature first being tied snugly, and a loop of from four to six inches being allowed to remain beyond the first knot. Two results are accomplished by this procedure: first, the prevention of the separation of the peritoneum from the tissues overlying; and, secondly, the provision of two retractors, which take up no room and cause less traumatism than the ordinary metal retractors. When the operation is completed the liga-

tures are clipped and removed, and the wound brought together according to the method adopted by the surgeon.—*Kansas City Med. Rec.*

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Notes and Comments.

The Maltine Company, those popular purveyors of malt preparations to the Medical profession, have just placed on the market Maltine with Creosote, which cannot fail to prove a valuable aid to the physician.

Each fluid ounce contains four minims of pure creosote.

Among the more recent remedies creosote has proven of the utmost value in the treatment of tuberculosis in its various forms, especially pulmonary, and in septic conditions of the alimentary canal as exhibited in different forms of diarrhoea. By its antiseptic properties it counteracts the toxic influence of tubercle bacilli, destroys bacilli of a less virulent type, and increases nutrition by stimulating metabolic activity. Its combination with Maltine has proved exceptionally serviceable in supplying a highly nutritious element, disguising the disagreeable taste and completely removing the tendency of creosote to produce gastric irritation; in fact, *pure* creosote, such as is used in this combination, causes little or no irritation in the alimentary canal even when taken alone.

In spite of imitations and questionable methods, this company stands at the head easily.

THE COMMERCIALISM OF CHRISTIAN SCIENCE.—That the "Almighty Dollar" holds a still higher post of worship in the Christian Science cult than it is popularly supposed to hold in the religion of the day is shown by the following story, which we quote from the *Public Health Journal* for December:

"Some two years ago I was attacked by an affection of the eye (a detachment of the retina), an ailment, I believe, incurable by medical science," says a contributor to *London Truth*. "I was persuaded to consult the Christian Scientists, which, out of curiosity, I consented to do. I wrote to Mrs. Ward, then, I

believe, 'chief prophetess' of the sect in London. I wrote to her making the following offer: 'That in the event of a successful treatment she should receive £200 as a remuneration for her services; in the event of a non-successful treatment the nominal fee of 2s. 6d.' In answer she wrote that Christian Science did not labor for money, and declined my offer. I wrote again, saying that I would be prepared to give this sum (£200) to any charity she might name, she retaining only such remuneration as she thought fit. In answer she replied she 'preferred a guinea a week.' "

The inane folly of this cult is not so distressing as its dishonorable and unblushing hypocrisy. We can respect honest differences of opinion, even though they may appear in the light of knowledge puerile and hopelessly ignorant. A kindly feeling of sympathetic pity is the one evoked by such a condition. Even the open roguery of the common charlatan can be met with some respect because it is open. But the hypocrisy of the professional Christian Science healer can provoke nothing but loathing and disgust."—*N. Y. Med. Jour.*

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—The ninth annual meeting of the American Electro-Therapeutic Association will be held in Washington, D. C., on Sept. 19, 20 and 21, 1899, under the presidency of Dr. F. B. Bishop, of Washington.

Quite a number of papers of great scientific value have been promised and the Committee of Arrangements insures the members a very entertaining and pleasureable meeting. Aside from the sessions of the Association, the Committee has completed arrangements for a trip to Mt. Vernon, one to Arlington, and several other social features.

The headquarters of the Association will be at Willard's Hotel, where special rates will be given to members and their families during the meeting.

PROPRIETARY GOODS; WHAT THE PEOPLE WILL HAVE THE DRUGGIST MUST SELL OR GO OUT OF THE BUSINESS.—A man who is specially inter-

ested in canvassing druggists for orders for proprietary medicines says that in several states there exists a combination among retail druggists to discourage the sale of all proprietary medicines which do not afford at least a 50 per cent. profit. They not only do not urge the sale of these medicines; but are careful to prevent any display tending to advertise them and to keep their stock of such goods concealed from view, and only hand them out when they are asked for by a customer who, in their judgment, will not accept anything else.

A leading manufacturer of proprietary medicines says that in his opinion the above statement is true, and works a serious injury to a good many druggists, who thereby drive trade to more enterprising, accommodating and honest competitors. Then he added: "No druggist can do very much to make or mar the sale of a good and popular article. If the people know about it and want it, the druggist must sell it or go out of business. If, on the other hand, the article is not good, well known and popular, the druggist will not keep it and cannot be hired to bother with it. If he is going to push the sale of anything by personal effort it will be invariably an article that he puts up himself." The conclusion that this manufacturer arrives at is that he must make good goods, make the price to the consumer as low as possible, make a quantity price that will afford a profit to dealers and a still lower price to the larger buyer, offer inducements for spot cash, advertise the goods boldly and largely, and the people will insist upon having them, and the druggist who tries to stop their sale will lose trade and prestige.

For every dollar's worth of sales lost through unfavorable combinations of dishonest druggists, continued he, there will come two dollars' worth of sales gained by the extra push of the more fair-minded among them who are bright enough to reap advantage of the false steps of incompetent competitors.

In conclusion, this manufacturer added that a 25 per cent. profit is more satisfactory to-day than a 50 per cent. profit was ten years ago, and the manufacturer of a proprietary

medicine who exacts 80 cents on the dollar of the retailer and spends 90 per cent. of his profit in advertising his goods need have no fear of any combination of dealers to restrict their sale.—*Printers' Ink.*

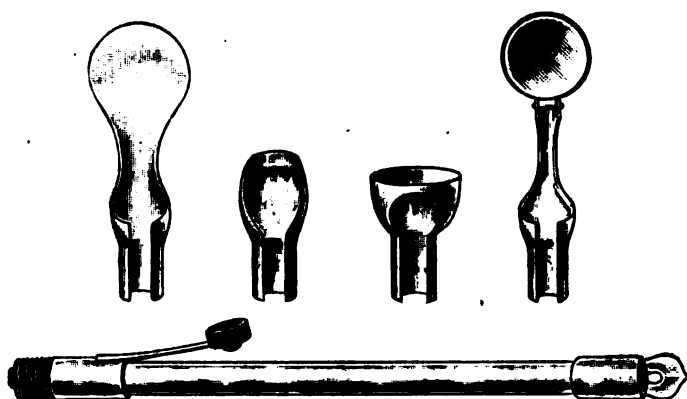
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Therapeutic Notes.

The Dow Portable Electric Assistant Company have just perfected a new lamp-holder and attachments, entirely different from the old style which they have manufactured for the past five years, and a great improvement on anything that they

an instrument on the market that is as complete and perfect in construction as the Dow; they are made upon honor and it is the constant effort of the Company to give the doctor just what he wants. The range in price is so great that they are within the reach of all. A thoroughly reliable and useful instrument is the first aim of the Company, and the second to produce such an instrument at as little cost as possible, consistent with the best workmanship.

There is no need of the doctor's paying an exorbitant price for his electrical outfit. He can obtain the best that modern skill has yet been



have previously made. By its use the life of the batteries is increased over 400 per cent., and the convenience in changing the different reflectors will be appreciated by every physician who is now using the old style.

The current is applied to the lamp on the new style by a press button on the lamp-holder and the lamp only burns while it is actually in use. The switch on the instrument itself does not have to be moved to shut off the current as before, neither does the lamp-holder have to be removed from the socket, to adjust a reflector, as before, which means a great saving of time to the doctor in making examinations.

The sales of the Dow instruments prove their value to the medical profession. Over 10,000 are now in use in all parts of the civilized world. The value of an instrument is often determined by the number of infringements or the number of imitations which are offered, and if that is a fact, the Dow Company have plenty of imitators, but there is not

able to produce at a fair price from this company. They make everything in the electro-medical line, except static machines, and if you want anything in their line, send for catalogue and prices to the Boston office, 218 Tremont street.

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AGAINST INSOLATION.—The *Riforma medica* recommends a teaspoonful of the following mixture every quarter of an hour until the complete disappearance of symptoms:

℞ Solution of trinitrine (1-1,000),
gtt. 20.

Aq., *m* 4,500.

M. When amelioration begins the doses should be progressively diminished. Tepid compresses of arnica may also be applied to the head.—*N. Y. Med. Jour.*

CEREBRO-SPINAL MENINGITIS.—

℞ Potassi iodidi, 0.5.

Aquæ font., 70.

Syr. aurant cort., 20.

M. Sig. Teaspoonful every two hours.—*Wiederhofer, Med. Rec.*

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Original Communications.

PRESIDENT'S ADDRESS.

BY JOSEPH M. MATHEWS, M. D., LL. D.,
LOUISVILLE, KY.

Delivered Before the 50th Annual Meeting of the
American Medical Association, held at Col-
umbus, Ohio, June 6-9, 1899.

LADIES AND GENTLEMEN:

In assuming the duties of the presiding officer of this association, I must confess that it is with a feeling of great diffidence. For many years I sat at the feet of the masters in medicine, as they were wont to assemble at their annual meeting, and was content to listen only to their wise counsels, to emulate as far as I could their example, and to profit by the words of wisdom which fell from their lips. When I reflect upon the names of my predecessors who have occupied this chair, their great achievements in medicine, the high rank to which they attained, and the good which they accomplished, it is no wonder that I assume the rôle with some trepidation. You will therefore permit me to offer you my very sincere thanks for the honor which you have conferred upon me.

In assuming the duties as your chairman, I hope to be just to all, and if at any time my decisions should appear otherwise, please attribute it to my head rather than my heart. It pains me to look over this great body and recognize the fact that not only many of its most prominent members in the past are absent, but also that the majority of those who have served you as president have also gone to their eternal home. Let their departure remind us that we, too, must soon lay aside our armor and join the silent majority. This thought brings me to consider for a moment:

OUR NATIONAL BODY; IT'S PURPOSES AND DESTINY.

I imagine that when the father of this Association, the Nestor of American medicine, called around him a few devoted friends, accomplished physicians and surgeons, and effected an organization to be known as the American Medical Association, that the first thought which filled their minds was the unification of the profession which they loved so dearly. It was their desire, no doubt, to bring together each year the men who were laboring earnestly and honestly for the elevation of the profession; that they in conclave could impart to each other the advance that each succeeding year had brought forth in their chosen calling and this done in order that the sick and afflicted could be profited thereby.

Sacrifices and great personal discomfort were endured by them to obtain the good; but what splendid results were accomplished by their efforts is evidenced in the assembling of this great body here to-day. I opine, too, that anything that partook of the nature of jealousy, unfairness, or politics was deprecated by them, but to the contrary they desired that peace and good-will should always obtain. What could be more beautiful than the fruition of this hope? How grand the thought that here in the mother society men of all grades, so far as education and accomplishments are concerned, be they great or small, poor or rich, the rank and file of the profession can meet on common ground and exchange views for the benefit of suffering humanity. Some must be teachers or instructors, others listeners; they each in their way contribute their mite. It may be that some member from a far-off and sparsely-

settled country has heard some truth that in its application a life may be saved, or in return he can give an experience which may prove of incalculable benefit to his more fortunate brother. Let me impress upon you, then, that no class legislation should be indulged in by this body. Let it not be said of us that we rule without reason, or that we are a set of politicians trying to secure benefit for the few against the many, or for the many against the few, for in nowise are we a legislative body. In lieu of all this, let us receive with open arms all who represent honesty, fair dealing, and entertain an earnest desire to elevate the standard of the medical profession, and of this Association. Let no wrangling come into our midst, but rather let peace and harmony prevail, with love to one another, as become gentlemen.

SHALL WE HAVE A LOCAL HABITATION?

It is to be seriously questioned whether this Association, so numerically great as it is destined to be, or in truth is now, profits in any manner by its migration each year to distant parts of the Union. It cannot be denied but that a mistake has been made in the past in going to cities too small to entertain it. It certainly adds no dignity to this distinguished body to be thus traveling about, not to speak of the inconvenience occasioned to the majority of its members by the so doing. Nor is it right or proper to impose upon a local profession the expense and trouble that it takes to entertain it. If the members will give the subject careful thought and consideration, I believe that they will come to the conclusion that the Association should have a local habitation. The natural question would then be, where could such habitation be found? In the selection of the same, many things would have to be considered. A city within easy reach, which offered the most attractive advantages. Of all, the city of Washington is the best suited. The Capital of the Nation, it has advantages that no other place can offer. With its great free libraries, it is the seat of learning; its magnificent Government buildings, its natural beauty, its select so-

ciety, its two houses of Congress, the rendezvous of foreign representatives and diplomats, the home of the Medical Departments of the Government Army, Navy and Marine Hospital Corps. Then, too, the idea is not far fetched that the Government, liberal always, would at some time lend the Association a helping hand in the way of securing a suitable building in which to hold its meetings and to become the owner thereof. Again, it would be in touch with the legislative department of the Government, and it can readily be seen of what value this would be in securing much-needed reforms in a medical way. The *Journal* would here find the most suitable of all abodes: an atmosphere of refinement, education and wealth. Its editor would all the time be on the alert, and much profit would come to the *Journal* from such surroundings and associations. I beg of you to give this matter your most serious consideration.

IMPORTANCE OF ATTENDING THE LAST DAY'S SESSION.

I desire to call your attention to the importance of attending the general session on the last day of the meeting. Business of the very greatest importance always comes up for consideration on that day, and, strange to say, that often there is scarcely a quorum present. At the meeting at Denver last year less than 50 members were in attendance on the last day of the meeting. If, therefore, resolutions are rushed through on that day which displease you, it is your own fault. Besides, if the business transacted on that day comes up for consideration at the following annual meeting, it takes up time which it has no right to. Please, therefore, see to it that nothing interferes with your attendance on that day.

CLINICS, DINNERS, ETC.

It has been a noticeable fact for a long time that the clinics which are held each year during the meeting of the Association, by the local profession of the city in which it happens to meet, very materially decrease the attendance at both the general sessions and of the various

Sections. This should not be, and it is the duty of the proper officials of this Association to deprecate the holding of such clinics. Time and again many of the very best men of the Association have been kept away a half day, and often a whole day, from the meeting, when their counsel and presence were much needed at the different Sections, or at the meeting in general session. Need I remind you that absence of the same kind and duration is often observed by dinners to which the members are kindly invited. This can be easily obviated.

THE JOURNAL.

It is my painful duty to announce to you the death of Dr. John B. Hamilton, editor of the *Journal* of the Association. This Association never had a truer friend than he. Possessed of a clear-cut individuality he was always outspoken, and what he did he at least believed to be for the best. We will miss his wise counsel in our deliberations. He made a most excellent editor of the *Journal*, and by his efforts it was brought up to the high standard which it occupies to-day. The Board of Trustees of the *Journal*, after careful consideration and deliberation, has selected Dr. George H. Simmons to succeed Dr. Hamilton as editor. You are to be congratulated upon this wise selection. Dr. Simmons is not an experiment, for he has won his laurels in medical journalism, and already stands among his editorial friends as the peer of any. Having come up from the ranks in journalism, he is acquainted with every detail, and that he will make a good editor goes without the saying.

THE MANAGEMENT OF THE JOURNAL.

I trust that it will not be considered out of place if I make a suggestion or two in regard to the management of the *Journal*. It has been frequently urged that much appears in it that should be expurgated. In other words, that a censorship should be established and many articles withheld from publication. I desire to disagree from this sentiment entirely and unequivocally. The *Journal* is simply the mouthpiece of the

Association, and if one single paper read before this body is to be refused publication, then you have violated your pledge and obligation. Any member has the inalienable right to disagree with the sentiment of any paper, and the editor is in no wise responsible for said sentiment. If a paper is good enough to be read before any Section in this Association, it is good enough to be published in the *Journal*. If any action is taken it should be by the Chairman of the Section before which the paper is to be read, saying to the reader that his paper does not come up to the standard. But who will assume this responsibility? and who is to judge the judges? May it not be that a paper, although couched in bad English, might contain matter of real merit? Many articles, too, with high sounding titles and verbiage beyond the comprehension of man may contain but little that is of worth, although written in perfect English, with deductions that would puzzle a philosopher, and which contain illustrations that would do credit to *Puck*. By all means let the editor improve the *Journal* in any way that he deems proper, but let every paper read before this Association or its Sections be published in the *Journal*. Let the reader select the wheat from the chaff, the good from the bad. In connection with the business interests of the *Journal*, I beg to make the following suggestion: Let a suitable man be selected, preferably a doctor, to travel in its interest, thereby increasing the membership of the Association.

This Agent, Secretary, Assistant Secretary, or whatever you may choose to call him, to solicit subscriptions for the *Journal* and encourage membership. He should visit the meeting of each State Society, District and County Society, besides calling on individual members of the profession. Of course, only those who are endorsed by accepted or recognized organizations can become members of this Association. There are many hundreds of worthy physicians in the United States who would readily join the mother society if properly approached. Many, very many, of them are ignorant of

the manner of becoming members. It may be urged that the salary necessary to secure such an agent would be too large to justify the employment of such. In refutation I would urge that by such individual solicitation many more would be added to the membership than would be necessary to pay said salary, and they would become permanent members. It can be said, especially to young men, that the mere wearing of the button of the Association adds dignity and confidence. Then, too, it can truthfully be asserted that the *Journal* alone is worth more than the sum paid for membership. By this means I am sure that the treasury would be so increased as to enable the *Journal* to be the peer of any published. Besides, our ranks would be so increased as to make this Association not only the largest, but the most important in all the world.

THE SECRETARYSHIP.

For several years there has been a heated debate, if not wrangle, at each annual meeting, in general session, over the secretaryship. This is both unseemly and undignified, and is to be much deplored. It seems to me that there is an easy solution to this matter. Let the editor of your *Journal* be the secretary of the Association. The Board of Trustees has wisely insisted that he devote his whole time to the *Journal*. It does, therefore, appear that the secretaryship should be one of his duties. By so acting he is brought into a closer relation with the business management of the Association and with the active membership of the same. He would himself be responsible for a correct report of all proceedings, and be enabled to keep them without fault. The question, should any addition be made to his salary for this additional work can be determined by the Board of Trustees. Our present secretary has served us long and well, and for his services in the past the Association should, and no doubt does, feel obligated to him. I am sure that he would be the first one to acquiesce in any move that would enhance the business interests or the prosperity of the Association. I

therefore very respectfully offer the suggestion as above stated.

SOCIETIES WHICH SHOULD BE RECOGNIZED.

In the last few months many good medical societies which have adopted the Code of Ethics have communicated with me through their secretaries, asking how they could get recognition by this body. I have found, in many instances that the State Society had failed to recommend them, but for no particular reason. Anyway, they are debarred from recognition by this Association. In several instances I found that said societies had a greater number in attendance at their meetings than did the State Society. I trust that something will be done in regard to this matter, in order that these good societies can obtain recognition from this Association.

The appointment by your Nominating Committee of three such distinguished gentlemen to read the several addresses before this Association in general session assembled, relieves me of any duty in that line. I shall therefore content myself with employing the balance of my time in asking your consideration of a few things which are not only a menace to the public health, but also to the safety of society. Having served as a health officer for many years, my mind naturally turns into this channel, especially so when I see an opportunity to enlist the interest and co-operation of this large and influential body of physicians.

TUBERCULOSIS.

It behooves this national body of American physicians to take some action, or at least to approve the movement to stamp out, as far as scientific effort can do so, that dread disease that kills one-seventh of the world's population—tuberculosis. A few days ago, May 24-27, there was held a tuberculosis congress in Berlin, international in character. The Liverpool Medical Institution, one of the most important medical societies in England, has recently appointed a committee of its members "to consider what further steps can be taken for the prevention of tuberculosis, and for the treatment of the

disease in the human subject." This committee propose to consider (1) the nature of pulmonary tuberculosis, its communicability and preventability; (2) the provision of sanatoria; (3) the more effectual methods of controlling spread of infection, and (4) the desirability of adopting some form of notification. The eradication of bovine tuberculosis received a powerful stimulus throughout the Empire when recently Her Majesty the Queen gave orders to have killed such of her herd of Jerseys as were shown by the tuberculin test to be infected.

At the recent meeting of the French Association for the Advancement of Science, the Section of Hygiene, at the suggestion of Professor Nicholas, passed a resolution pointing out that the convection of tuberculosis by inhalation is only one of the modes of infection, and that a larger part of the diffusion of the disease is played by contagion through the alimentary canal, as proved experimentally and clinically, urging the necessity of taking adequate measures to insure the sterilization and harmlessness of articles of food. All Europe is wide awake to the importance of this subject.

From carefully prepared statistics it is found that of the deaths from all causes between the ages of fifteen and sixty years, one-third of the number are victims of tuberculosis, and that it kills four and a half times as many people as do smallpox, scarlet fever, typhoid fever, and diphtheria combined. It is estimated that at any given time in Germany alone 1,300,000 persons are affected with tuberculosis, and Osler says that 1,200,000 in America have the disease at all times. One in every fifty persons have the disease. Over 13,000 die of tuberculosis in the State of New York every year. In every American city the proportion of deaths is equally as great. So important has this subject become that at a recent convention held in England to consider the question, "How to Prevent the Spread of Consumption," the Crown was represented by His Royal Highness, the Prince of Wales, who presided over the meeting. Great encouragement was given the move by Royalty and all others.

The medical profession all over the world is deeply interested in the subject, the aid by governments solicited, and every effort is being made to suppress this formidable disease. Since the germ which causes it is known, and its habitat, the condition under which it thrives, and that the disease is contagious, it does appear but rational to assume that it not only can be prevented by precautionary measures, but that it can be cured by proper environment and treatment. It is equally true that, even in the best of homes, the treatment usually accorded the patient is *nil* in effect and accomplishes nothing. Something more than this must be done if we expect to materially decrease the death-rate. What is that something? Detweiler believes that over twenty-four per cent. of cases of tuberculosis are curable; Meisen, twenty-seven per cent.; Braymer, twenty-one and one-half per cent. And this under ordinary climatic and hygienic treatment. A much higher percentage of recoveries could be recorded if a real systematic and scientific treatment could be afforded these patients. Such a course can be instituted only in well-ordered and equipped hospitals designed especially for such inmates. In regard to the extent of the disease, I can do no better than to use the words of Prof. Hirsch. He says, "It is emphatically a disease of all times, all countries, and all races. No climate, no latitude, no occupation, no combination of favoring circumstances forms an infallible safeguard against the onset of tuberculosis, however such conditions may mitigate its ravages or retard its progress. Like typhoid fever, phthisis dogs the steps of man wherever he may be found, and claims its victims among every age, class and race." In answer to the question, What is to be done to prevent its progress? I would suggest a remedy in using the words of a resolution adopted at the International Congress of Hygiene in Brussels, in 1897: "The hospitalization of tuberculosis is urgent and will not long be withheld." In several large cities in the United States an earnest effort has already been made to carry this thought into practical utilization, especially so in Chicago and New York. It can readily be

seen, however, that but a comparative few out of this great number of afflicted can be accommodated in this manner. A country or state that is ever on the alert to prevent the landing of a foreign foe, or a hostile army, surely should ever be ready to aid in the suppression of a foe to the human race ten times more destructive to human life than the invasion of the country by an army of great size armed with the most improved rifles. Let us, then, in the name of humanity, invoke aid from the government of this very humane people, in order to help to put down and thoroughly conquer this foe.

During the last session of the New York legislature a report of the senate committee appointed to investigate the advisability of establishing a state hospital for the cure of consumptives was made. Many reasons for the same were presented in the report. Among other things, the report read: "Tuberculosis is one of the most fatal diseases that the human race has to combat at the present day; its yearly victims inflict a serious and unnecessary drain upon the resources of the state. Unnecessary because it is now demonstrated beyond question that by the adoption of proper preventive measures a large proportion of those who suffer from this disease may be saved. This is proven not only by the revelations of science, but by the results which have been obtained in the practical application of the means to prevent the spread of the disease. A large proportion of the cases brought under treatment have been cured, and so many have so improved as to be restored to the producing class. It is also shown that the efforts of the boards of health in this and other states, as well as in other countries, have so far succeeded in reducing the percentage of deaths from tuberculosis by the measures adopted that there is good ground for assuming that with wise laws properly enforced this disease may be almost wholly obliterated." Is it too much, then, to suggest that this Association, representing the most advanced thought of the medical profession of America, take action in this important matter? I would most respectfully urge you to appoint a

committee to prepare a careful report on this subject and present it to the next congress sitting, beseeching that this government erect, prepare, or donate hospitals or reservations in and at which the poor or others shall receive treatment for the cure of consumption. Also that it be impressed upon state boards of health in the various states the advisability of the respective states erecting similar institutions. The blind, the deaf, the insane, the feeble-minded and other classes are so provided for, why not these? They are not able to care for themselves, and they are a menace to the public health. It must be confessed that in so far as the prevention of the disease is concerned, that must come from the education of the people to the facts. The best way to accomplish this I leave to you.

THE ANTI-VACCINATIONISTS.

It may appear superfluous to ask that you consider, in the proper way, a rebuke to a certain class that is doing much to endanger the lives of our citizens, and whose meddling ways are giving the health boards of the various states much annoyance. I allude to the anti-vaccinationists, encouraged as they are by an Anti-Vaccination Society. It seems strange and beyond belief that citizens of respectability and supposed intelligence should band themselves together to prevent a means of saving human life. But "'tis true, and pity 'tis, 'tis true." If these misguided people would only inform themselves of facts, patent to every reader of history, they might at least stop long enough in their mad career to think.

The true condition is so well described by Dr. Seys in a recent paper that I beg to quote from him: "Well has smallpox been termed 'the most terrible of all the ministers of death.' It dates back to the early history of our race, but from whence it came no man can say. Then all expected to have it and but few escaped. No respecter of persons, it was found in the palace and in the hovel, in the fair green fields and in the foul dungeon. All ages yielded to its noisome touch, and no season of the year was free from its deadly breath. One-

third of all children born to the daughters of men died before they were a year old because of this pestilence, and one-half before the age of five. In epidemic years it is estimated to have caused fifty per cent. of all deaths in Europe, and in non-epidemic years not less than ten per cent. Two-thirds of the pauper blind in Europe of that day looked no more on the faces of their loved ones or the blue sky, nor saw the light of day, because of its blighting visitation. In Mexico it is said in a few years to have caused the death of three and a half million of people. Iceland and Greenland were almost depopulated by it, and it has well-nigh rendered extinct some of our Indian tribes. It was the all-important factor in keeping down the population of Europe. Nor would the task be a difficult one to-day, should we desire to do so, to bring back the horrors of but a few years ago."

We may rest in peace and disregard the efforts of these half mad people, but we must not close our eyes to the fact that, by their loud cry, aided by political influence given often for self aggrandizement, they are endangering the lives in every community. So far has this thing gone, that the vaccination law in England has but recently been amended so that only those who may desire shall be vaccinated. This is a menace to the public health and smacks of the dark ages. I again respectfully ask that you give to the medical profession in America an endorsement of their views in a resolution sustaining *compulsory* vaccination. The safety of the people from this most direful malady demands it.

A CRUSADE AGAINST SYPHILIS.

An International Medical Conference will be held at Brussels, Belgium, in the month of September next, known as The International Conference for the Prevention of Syphilis. A statement of this fact has been sent the honorable secretary of state of the United States, through the Belgium minister at Washington, with request that he appoint a delegation to attend this important conference. The honorable secretary in turn requested me,

as your presiding officer, to name said delegation. This I have already done, as the call was for immediate action. In the preamble which accompanies this notice the following language is used: "The increasing propagation of syphilis and venereal diseases has become a serious danger to society, and it is important while there is still time to take efficient measures to stop the progress of this scourge. The spread of the evil is an incontestable fact; on this point all physicians who are in a position to know or observe its progress are agreed. The number of victims increases daily, and a serious consideration is that this malady is penetrating into strata of society where it was formerly rarely seen. Scarcely any attempt hitherto has been made, without concerted action, without preconceived plans, and without an international understanding to success."

What can be said of Belgium in this regard can be said of the United States. Perhaps the ratio of cases is not so large, but this matters little. It is estimated that there are in this country between six and seven million people who are afflicted in one way or another with syphilis. A distinguished French authority says that one man in every four has the disease in France. When we consider that by this the very foundation of society is shaken, our families imperiled, the constitutions of our youths undermined, our women wrecked, it is high time, as this official says, that we turn our attention to the subject. The warning should be in words that the most illiterate man or woman could understand, and it should emanate from sources and places that would reach the greatest number. Our false modesty in the past has been too pronounced, and has prevented us from giving to the common people valuable information; so we are in a measure, as a profession, much to blame for the great spread of this blighting curse.

The time has arrived when we as physicians, singly or when in convention assembled, should throw aside all restraint when dealing with this vital question. Fathers, mothers, sisters, brothers, and all others should be informed, and this information should

be in the plainest language. The minister and the priest should aid the doctor in this praiseworthy undertaking. The doctrine should be inculcated into the young of both sexes, that freedom from this awful condition should exist before the marriage relation is thought of. Upon this declaration rests the hope of the state, as well as of families, for neither good soldiers, good citizens, nor good husbands, with tainted blood can be had. Please permit me to suggest that a committee be appointed from this body, to report at the next annual meeting, on the subject: "What is the Best Means of Preventing the Spread of Syphilis?"

A PLEA FOR HARMONY.

In conclusion, let me beg of you that this meeting be one of perfect harmony and peace. Let nothing of an acrimonious nature be indulged in, but rather let your deliberations be characterized by patience, love for each other, and a desire to ennoble the profession to which you belong. For are we not brothers indeed, fighting for a common cause—the obliteration of the common enemy, disease? May your future life, each and all of you, be one of peace and perfect happiness; and may God grant to all a long life filled with good deeds. If fate should decree that any one of you should pass away before we meet again, may you find eternal rest in "God's next country."

CONGESTION OF THE FEMALE PELVIC ORGANS.—The *Riforma medica* recommends the following:

℞ Sulphate of magnesium, gr. 450.

Sulphate of iron,

Sulphate of manganese, aa gr. 120.

Dilute sulphuric acid, *m* 45.

Distilled aq., *m* 1,800.

M. A tablespoonful to be taken before breakfast in a wineglassful of water.—*Ex.*

MOUTH WASH FOR CHILDREN.—

℞ Acidi boracici, 3.

Aquæ font. dest., 200.

Tinct. myrrh, 2.

M. Sig. Mouth wash.—*Monti, Med. Rec.*

ASTHMA AND ITS TREATMENT.

BY G. A. GILBERT, M. D.,
DANBURY, CONN.

IT IS now generally conceded that asthma is essentially a disease of the nervous system, depending upon a central or peripheral irritation of the vagus, which produces contraction of the muscles of Reissensen. The paroxysm is thus described by Biermer: "The air entering the lung in inspiration is pent up by the spastic constriction of the bronchi, which, acting as a valve, admits of its passage in one direction, but impedes its escape during expiration and thus causes inflation of the air cells and insufficient aëration." It is admitted, too, that not only is the vagus involved, but the vaso motor system as well—contraction of the arterioles and high arterial tension being the inevitable result. As physiologists tell us that the amount of respiratory surface in both lungs is about 156 square yards, and that this entire area is richly endowed with capillary blood vessels, it will at once be seen that any general constriction of the latter must necessarily interrupt to a marked degree the normal function of respiration, and interfere with the interchange of oxygen for the poisonous carbon dioxide; while in the more remote parts of the body there will be a deficient circulation and interchange between the blood and tissues in and on the distal side of the obstructed vessels.

In relation to the *cause* of the abnormal condition above described, it may be well to refer to the statement of the celebrated Haig, of London, who says: "Very little experimentation will suffice to convince any one that contraction of the arterioles varies directly with the amount of *uric acid* that is circulating in the blood, and the only way to treat asthma is to clean the blood of uric acid and keep it clean." That uric acid produces high arterial tension and the condition leading to asthma is now well understood. It is believed that the biurate crystals, by their points, set up a reflex irritation of the terminal branches of

*[Cf. Volkmann's *Sammlung klinischer Vorträge*, No. 12, Leipzig, 1870.]

the vagi in the bronchial mucous membrane, thus initiating the asthmatic attack; the latter being paroxysmal, for the same reason that migraine is paroxysmal, in accordance with the natural fluctuation of the uric acid and the amount of that toxine passing through the blood; and not until the emunctories of the system eliminate the poison may permanent relief be expected. Two confirmatory facts which would seem to favor this hypothesis are, first, that most attacks of asthma occur at from 2 to 4 o'clock in the morning, when the uric acid flood is at its height; and, second, that after an attack of asthma, as after a uric acid storm, there is a flow of limpid, pale urine, in great abundance.

Though probably all cases of asthma are not due to the presence of uric acid in the circulation, yet it will be found that nearly every case will be benefited if attention is given to its elimination by means of dieting and the proper medication. In the opinion of Dr. Scott, an eminent Texas physician, the factor that produces rheumatism also produces asthma; and he, furthermore, cites the clinical fact (often observed by the writer of this article), that the two diseases do not co-exist in the same patient, but that the one usually precedes or follows the other.

Having decided, therefore, upon the factor most fertile in the etiology of the condition known as asthma, it now behooves the careful physician to turn his attention toward the proper therapeutic agent to remove this toxine from the system; and thus, after long groping in the darkness, be enabled finally to treat his asthmatic patient in a rational manner. As regards a remedy for the removal of uric acid from the system, the stage of experimentation has been passed, and it is now quite generally the opinion that the laxative salt of lithia (thialion) is the most potent antilithic agent to be found in our present *materia medica*. As iodide of potash was once given empirically, its partial success being due to the formation in the system of the partially soluble urate of potash, and its partial elimination by the kidneys; so now is the laxative salt of lithia given rationally, for the

purpose of completely dissolving the uric acid by the formation of the freely soluble urate of lithia, and its consequent complete elimination by both kidneys and intestines. Concerning the physiological action of thialion, it has been found that in addition to its important solvent and hydragogue properties, it has a marked effect in reducing arterial tension, a condition always present in the paroxysm of true bronchial asthma.

Dr. Isaac J. Jones, (*Southern Practitioner*, June, 1899,) of Texas, who has had the medical care of a large number of chronic asthmatics, rheumatics and sufferers from migraine during a four years' service at the Confederate Soldiers' Home in the city of Austin; and who has had an unusually wide experience in the treatment of these diseases with various salts designated to neutralize the uric acid poison, and favor its elimination from the system,—states that it was not until he began the use of thialion that the results of his treatment of these cases became at all satisfactory. The virtue of the salt in these conditions, he believes, is due not only to its possessing the well-known solvent properties and diuretic action of lithia, but also to the fact of its being an efficient and pleasant laxative,—increasing the flow of bile in a marked manner, and, in consequence of its hydragogue properties, relieving any indicanuria that may exist. After using the drug upon himself with good results, Dr. Jones prescribed it altogether in his practice, and among other interesting cases, reports the following:

"D. C., male, aged 68 years, was for years a sufferer from rheumatism, being blind from iritis, probably of rheumatic origin. Some years ago the rheumatism disappeared only to be replaced by bronchial asthma of severe type. I exhausted every resource of the pharmacopœia upon this patient, having him under my constant care in the hospital for four years. The only success that rewarded my efforts was that I found that I could abort his paroxysms with a mixture containing a half grain of codeine sulph. and fifteen minims aromatic spirit of ammonia

to the dose. I gave him thialion in the usual dose for sixty days and discontinued it. He has not had a paroxysm of asthma since. There is no symptom of his disease remaining except a slight bronchial discharge, easily coughed away. He has gained fifteen pounds in weight.

J. F. D., aged 72, male. Old case of bronchial asthma, with much emphysema and chronic bronchial catarrh. He was also under my care for four years. His respiration, at all times difficult, passed to a state of extreme dyspnoea during his paroxysms pitiable to see. These paroxysms occurred twice a week as a rule, but he was never able to sleep more than an hour or two consecutively, at any time. His condition was aggravated by the least exposure, and by sudden changes in the atmosphere or humidity. I gave the thialion in the usual dose, and continued it for sixty days. He has had none of the severe paroxysms since. Respiration, while still somewhat difficult, is uniform, and so much improved that he sleeps normally. In fact, after two months' observation, I think I can safely say that his asthma is cured, and were it not for the structural conditions engendered by it he would be well."

Dr. L. H. Watson, of Chicago, in an article entitled "Uric Acid as a Cause of Asthma," published in the *Southern Medical Record*, February, 1899, states that he has also used this form of the lithia salt in asthmatic cases of long standing, and has met success beyond his most sanguine expectations. He appends in his report the following two typical cases:

"Miss L—, a maiden lady, 50 years of age, a long sufferer from hay fever which usually begins in August and lasts until the first frost. In Nov., 1898, she suffered from persistent asthmatic attacks which were supposed to be due to the hay fever. Obtaining only small relief from all the usual remedies she placed herself under the care of a specialist, who proceeded to cauterize and burn out the redundant nasal mucosæ, which seemed to be the irritating cause of her attacks. The asthma continuing, she came under my care. Discovering her to be a confirmed

dyspeptic, I first attended to her diet and placed her upon thialion. In a couple of weeks relief came, and in six weeks after the treatment was commenced she had no further attack.

The second case was that of an old asthmatic, Mr. K—, who was also an old dyspeptic. Winter and summer this gentleman, who possessed a large amount of this world's goods, was constantly using Himrod's pastilles and cursing his fate. Thialion combined with treatment directed to get his stomach in fair condition has so relieved him that I cannot persuade him to stop its use. He takes it constantly every morning in hot water, and while he wheezes a little now and then when he has been indiscreet at table, he is practically well."

On hearing of the treatment above described and the successful results attending it in the hands of these two physicians; and being familiar with the action of thialion in certain cases of the uric acid diathesis, the writer determined to adopt the same method of treatment in the following case, which had hitherto baffled every attempt to afford substantial relief:

Fred. K., German-American, aged 45, barber by trade, has been a sufferer from spasmodic asthma for the past fifteen years, during the last two of which the asthma has alternated quite regularly with muscular rheumatism. The asthmatic paroxysms have often lasted two or three days, confining the patient to the house. Usually, however, they have occurred during the night, lasting for about an hour, during which time it would be impossible for the patient to remain in bed,—his dyspnoea at times being so great that the physician was frequently sent for. Until March of the present year the usual alkaline preventive treatment was adopted, consisting of iodide of potash, Gardner's syrup of hydriodic acid, etc., with inhalations of nitrite of amyl, burning nitre paper or stramonium leaves, during the paroxysms,—the patient hying away to the White Mountains an occasional summer. Under this procedure partial relief would ensue for a short time, when the disease

would again appear, disappear and again appear, until patient and physician had become discouraged,—both regarding the case as incurable.

At the beginning of March, 1899, the above method of treatment was entirely abandoned, and the patient put upon thialion and instructed as to his diet,—strongly nitrogenous foods being interdicted. The first day a teaspoonful was given in a cup of hot water every three hours until free catharsis supervened, after which the same dose was given only once a day,—every morning upon rising. This was continued pretty regularly for nearly two months, the patient being told to skip the medicine for a day or two whenever the litmus paper indicated alkaline urine,—the object being to keep the latter at or about the neutral point. In regard to the results obtained by this simple method of treatment, it is perhaps well to note that the patient deemed himself cured at the end of the first month, since which time he has suffered no attacks, either of asthma or rheumatism. His general bodily health is now much improved, an irritable temper has given way to a more amiable disposition, and his nights are devoted to securing the rest and sleep of which his system has been so long deprived. Though after the elapse of only twelve weeks, it may, perhaps, be considered too early to declare this patient cured, yet, if proper attention be paid to the condition of the urine, preventing any collection of uric acid by timely dosage with thialion, the writer of this article is satisfied that the patient may be promised immunity from any further attacks of his old complaint.

TINNITUS AURIUM.—

R Tinct. cimicifugæ, *m* 160.

Aq., $\frac{3}{2}$.

M. Teaspoonful three times a day.—*Patton, Med. Rec.*

BALDNESS.—Barie (*Cronica médica*) gives the following:

R Hydrochloric acid, gtt. 75.

Alcohol, gtt. 2,250.

M. Rub the hairy scalp every night with this liquid and the falling of hair will cease.—*Ex.*

INFANTILE SCURVY.

BY THOS. W. HARVEY, A. M., M. D.,
ORANGE, N. J.

Read before the Orange Mountain Medical Society,
May 19, 1899.

WHEN the article under this title in the "Twentieth Century Practice" was written the author could find but 100 cases reported by American writers, about 40 by English, and 12 by the Germans, and he was constrained to call it a rare disease; when so few cases had been reported out of thousands of cases of rachitis and out of millions of children who are artificially fed.

In the report of the American Pediatric Society of its collective investigation of June, 1898, they have collected 379 cases. We can therefore conclude that it is either a rare disease or one frequently unrecognized.

I have two cases to report. The first, an infant girl, 11 months old, born of healthy parents, and with a very good family history, had been entirely well all its life except for a few days diarrhœa, when seven months old.

During the first six months the child was fed on "Certified" Milk*—Pasteurized—taking the top milk from the bottle in the proportion of one-third milk to two-thirds water. At six months the proportion was half and half, and, as the child was constipated, the pasteurization was stopped and Mellin's food was added to the diet, at first once a day, increasing until she was soon taking the food with every meal.

The child was thriving, gaining one-fourth pound every week as a rule.

On Christmas day baby was then nearly eleven months old, weight twenty and one-half pounds, fat, hearty and rosy.

On this day the mother said to me that the child no longer used its legs to raise itself, and that they appeared to be sensitive. The baby cried when they were handled. The mother had noticed these symptoms for a week.

There was no true paralysis, the baby could move the limbs, but

* "Certified" milk is special milk supplied by the Fairfield Dairy for invalids and babies.

would not; the tenderness was not in the joints they could be flexed without pain; there was no fever, no swelling appreciable, no hip-joint symptoms, no swelling of the wrist and no "rosary."

The only symptoms that were noticeable was that the child did not voluntarily move the limbs and cried if they were handled.

She was taking Mellin's food and certified milk, using about one-third water.

As usual the first thing that suggested itself was rheumatism; infants do have rheumatism, or at least they have a symptom-complex which is relieved by the salicylates.

These medicines were accordingly administered in this case, but without effect.

The symptoms steadily increased until Jan. 18th when the child was evidently very sick. The sensitiveness had become extreme, she would cry most of the time, even when lying still, and the least movement of the limbs was very painful, the child had lost its rosy cheeks, slept badly, seemed to have pain about its jaws or ears and would only take about two ounces of milk a day.

On this day I noticed that the gums were purple and spongy around the two central incisors and that the tip of the tongue had a spot on it about the size of the top of a pencil, which looked bruised.

These symptoms had been absent the day before, but their presence indicated clearly that this hearty rosy child was the victim of scurvy.

The Mellin's food was stopped, the salicylates were stopped, and the baby ordered to have the same milk, unmixed with any food, to have the juice of an orange every day, and to be taken out of doors.

In four days the symptoms had nearly all disappeared and in one week the baby was entirely well, kicking and putting her weight on her limbs.

During the sickness she had lost a pound in weight, in the next month she had gained one pound and a half.

I never could satisfy myself that there was much swelling of the thighs, but with this exception the case is typical of the disease as described by systemic writers.

The second case, a child 12 months old, when first seen had purpuric spots on both feet and a painful swelling of the lower end of the right femur, with great sensitiveness of both legs; a day or two later the purpuric spots appeared on both hands and arms.

This child was rather anemic looking, and the father and mother were not very vigorous, they lived comfortably, however, and there had been no privation. She had been fed on cow's milk diluted with boiled water alone and not prepared in any way except heating to the proper temperature for feeding, when she was about six months old strained oat meal water had been substituted for the boiled water.

The child had no gum symptoms, and the spots were characteristic of purpura hemorrhagica, however, I ordered the oat meal water to be omitted from the dietary and orange juice and beef juice to be given, with the result that all the symptoms disappeared in a week.

Here then is a disease, the early symptoms of which are very characteristic, extreme sensitiveness and pseudo-paralysis of the limbs and spongy and bleeding gums, and yet it is a symptom-complex which is often unrecognized by the practitioner, often to his discredit and to the glory of the specialist, who recognizes and prescribes for it.

While the literature of scurvy is said to be more extensive than that of any disease, this form has only been recognized and described accurately during the last fifteen years and almost entirely by English and American observers.

By some it is still considered a form of rickets, acute or hemorrhagic or scurvy rickets it has been called although, Northrop has recorded cases, with symptoms of both diseases who have been cured of their scurvy symptoms, and have remained unrelieved of their rickets and also cases who have died with scurvy symptoms, who have presented no indications of rickets at the autopsy.

Barlow's paper in 1883 was the first where a series of carefully observed cases were reported and in which it received its distinctive title.

The pathology is still obscure, but periosteal hemorrhages are common.

This disease belongs to a class of which hæmophilia is a type, and which Wilhelm Koch has grouped together as manifestations of this same disorder. There is some change in the blood, Barlow says a chemical one caused by deficient alkalinity of the blood. Northrop believes that it is a dyscrasia affecting the capillaries.

The etiology of this disease is of interest and of the utmost importance to us as practitioners. It is a disease due to dietetic errors, and the fault to be looked for is the administration of food that is not fresh. Nature intended that the infant should have its food in the freshest state right from the breast. Here are two cases where the milk was all right, in one there was a proprietary recooked infants food added in another a re-cooked oat meal. When these foods were taken out of the dietary the symptoms ceased. Why the children could have taken them for several months without having any trouble, and why so many thousand children can take such additions without harm is far beyond my ken, it does, however, suggest very forcibly that in these individual cases, the few hundred out of the many million artificially fed babies, that it is not the particular food, that it is not necessarily sterilized milk or condensed milk, or Mellin's food or any proprietary or partly malted starch food of any kind that is the cause but the fault lies in the fact of the long continuance of the same diet, that diet not being fresh. It is frequently among the children brought up by rule that this disease has been seen.

No child was more carefully cared for, with more attention to detail, that the first case that I have narrated, not the deviation of a hair line had been made from the rigid diet advised by the attendant.

Immediately the orange juice was introduced into the diet, the child improved. The improvement is so rapid in these cases that it almost seems as if there had been a poison present in the system to which orange juice is an active and complete antidote.

I do not see how we can charge the disease to sterilized or cooked milk when we recall the fact that from Germany where the use of

cooked milk is almost universal, we have had very few cases reported.

Again as to condensed milk. This form of food is undoubtedly a cause of sickness in some children, for while I have raised very many children on condensed milk, who have thrived from the beginning to the end, in a fairly large number the food has had to be discarded because it caused eczema. I have seen a baby who was being fed on condensed milk with an acute universal eczema, which was evidently about to kill the child. This child was put to the breast of a wet nurse, and the eczema disappeared within thirty-six hours.

With a fairly large experience in artificially fed children I have not seen scurvy among the condensed milk babies.

The diagnosis from other diseases is most interesting and exactness is highly important. General treatment is utterly of no value in infantile scurvy. There is a specific treatment of a very exact and precise nature, and such treatment is followed by immediate results. Magical is the adjective that suggests itself, when watching the course of this disease when properly treated.

The most common error is to call it muscular rheumatism and the early symptoms are very suggestive, not only of muscular, but even of articular rheumatism, particularly when, as in my second case, the swelling of the femur is very near the joint.

The condition in scurvy is more that of extreme sensitiveness than pain; in my first case the little patient only cried when she was touched, it was the handling of the legs that caused her to cry. Many passive movements were possible without causing pain, for instance, at first, the pain was in one leg, and the possibility of hip-joint disease was considered and disproved by the painlessness of extreme flexion of the thighs, but any handling of the leg near the knee caused crying.

Then, again, handling of the leg without making any motion caused pain as the disease progressed. This would not be usually the case in muscular rheumatism. The joints are unaffected, the swelling of the

limb is outside of the joint, there is no increased temperature; furthermore, the anti-rheumatic remedies are of no use, while the proper diet causes immediate improvement.

The pseudo-paralysis suggests infantile paralysis. In this disease, however, usually but one limb is affected, the paralysis comes on suddenly and there is no tenderness or swelling of the limbs, and the pain does not steadily increase.

In other paralyzes of spinal origin there may be an affection involving both limbs, but the other symptoms are easily differentiated.

In syphilitic pseudo-paralysis the conditions are similar, but the presence of general scorbutic symptoms will assist the diagnosis in the later stages, while the absence of other characteristic signs of hereditary syphilis will indicate the difference in the invasion of the disease.

The disability in infantile scurvy is due to the pain caused by moving the limbs, although in the later stages of the disease there may be disability from separation or the epiphyses.

We may diagnose this disease from rickets by the fact that in this latter disease we do not find the marked hyperæsthesia, the hemorrhages, the bleeding gums, and, as before stated, we do have the immediate amelioration of all symptoms by dietetic treatment. We have always to bear in mind that both diseases may be present at the same time.

In cases that proceed further in the disease than those cited we will have a general progressive cachexia with hemorrhages from the mucous membranes and beneath the skin, the bones become more and more brittle, fractures may take place in the shafts and death will come from exhaustion.

The treatment as has been already noted is simple.

Fresh cow's milk properly modified, orange juice and beef juice, rest for the painful limbs, and absolutely nothing else, either of food or medicine.

After the specific symptoms have disappeared the question of the treatment of any complicating dyscrasia may be considered.

I have always felt that the proper diet for these patients would be goat's milk fresh from the udder. I have never yet failed to have good results with goat's milk with the most delicate babies. I think that it is to be preferred to the most scientifically modified cow's milk that ever came out of a laboratory.

I should say from the few cases that I have knowledge of that a good formula for producing this disease would read as follows:

A young mother with high ideals of maternal responsibilities and a firm determination to have a model baby and to bring it up by rule, a book on "How to Raise the Baby," a journal devoted to the nursery, and to these should be added a doctor given to laying down rules of management with great attention to detail.

The child on the farm, who pecks at everything in sight as soon as it can crawl, Pat's young one, who has everything that Pat has, even to a "drap of the crather," and Han's "kind," who sips the foam from his beer mug, with a little kraut occasionally, these children seldom have scurvy; they have enough trouble caused by such diet, but they don't have scurvy. The variety saves them.

TINEA CARCINATA,—

R Creasoti, *m* xx.
Ol. cadini, fl. 3 iij.
Sulphuris, 3 iij.
Potass. bicarb., 3 j.
Adipis, 3 j.

M. Sig. Use locally.—*Van Haringen, Louisville Med. Mon.*

PAIN OINTMENT.—

R Benzoinated lard, 3 20.
Laudanum, fl. 3 2.
Chloroform, *m* 90.
Ext. belladonna, 3 i.
Ext. cicuta, gr. 30.

Apply on the seat of pain.—*Clinica moderna.*

MOUTH WASH.—

R Sodii biboratus, gr. xv.
Thymoli, gr. viij.
Aque dest., 3 viij.

Med. Rec.

VERTIGO.

BY PHILIP ZENNER, A. M., M. D.,
CINCINNATI, OHIO.

Lecturer on Diseases of the Nervous System in the
Medical College of Ohio.

A paper read by title before the Ohio State Medical
Society in Springfield, Ohio, May 11, 1899.

WE ARE wont to devote ourselves in our medical societies to the consideration of the unusual in clinical or pathological aspects. But it is often not without gain to discuss conditions of disease with which we meet more frequently. This paper will treat of one of the most common nervous manifestations, vertigo. It will be devoted chiefly to a study of the nature of vertigo, or rather its proximate causes, and will only briefly allude to clinical forms and their treatment.

The term vertigo has been given in times past to diverse manifestations, and is, even yet, sometimes loosely applied. To-day what is usually expressed by the term is, that visible objects appear to be moving (objective vertigo), or the patient feels as though he himself were moving (subjective vertigo), or both. That mere vertiginous sensations, "light headedness," a sudden sense of darkness, a sense of unsteadiness or insecurity, and the like, are of the same nature, is indicated by the fact that these milder sensations often continue to be present after a severe paroxysm has subsided, as well as, that either the milder or severer sensations may be artificially produced by applications of the galvanic current to the head, according as a lesser or greater strength of current is applied. Other symptoms must be looked upon as a part or accompaniment of an attack, such as tinnitus, deafness, nausea, vomiting, cold perspiration, faintness, mental confusion, occasionally even momentary loss of consciousness, and, not only a sense of movement, but also actual movement of the patient. A sense of fright or even terror often seizes the patient with the onset of the attack which completely bewilders him and makes accurate observation of his subjective state impossible. At the same time there can be no doubt that much that is called vertigo does not

really belong to this category of symptoms. Doubtless this is true of many attacks of transient loss, or blunting, of consciousness, and of some subjective sensations spoken of as dizziness.

Vertigo is usually interpreted as a consciousness of disturbance of the position of the body, or of the sense of equilibrium. Therefore we are called upon in this study to consider the subject of equilibration, and of the sense of the position of the body in space. The limited time allotted me compels me to be very brief in my remarks upon this subject. The spatial sense, or the sense of spatial relations, is the sense of sensations received from the skin, muscles, eyes and ears. All these sensations are received and co-ordinated in some subcortical center of the brain, believed to be the cerebellum. This subcortical center in its turn directs and controls the action of the muscles which maintain the body in its appropriate position. This action of the subcortical center is done without the guidance of the cortical centers, for equilibration is, usually, an unconscious and automatic act. At the same time the highest, the cortical, center is in relation with this subcortical center. It is very likely that equilibration, though an automatic act, was in the beginning directly under the control of the cortical center, and only after long practice became automatic; and even now it may at any time come to the cognizance, or under the direct guidance, of that center.

Disturbance of any part of the mechanism of equilibration, of the afferent or efferent nerves, or of the respective brain centers, will cause disturbance of the equilibrium of the body. Never-the-less disturbance of any part does not necessarily produce vertigo. For instance loss of tactile and muscular sense in locomotor ataxia causes impaired equilibrium but not vertigo; the same is true of ataxia from destruction of the efferent nervous tracts; and even disease of the middle lobe of the cerebellum, whilst it produces a reeling gait, may not be attended by vertigo. As far as the peripheral mechanism of equilibration is concerned only the ear and eye appear to be directly related

to add to the probability of its accuracy. It seems, in other words, to be a confirmation of Mendel's views. At the same time Mendel disbelieves the relation of the labyrinth to vertigo. He discredits the deductions, drawn from the long list of experiments from Flourens down, that the labyrinths are the balancing organs, believing with Baginsky that the results of experiments were due to the escape of the cerebrospinal fluid from the labyrinth and consequent changes in the cerebral circulation, and not directly due to the labyrinth. Even the vertigo of Meniere's disease he attributes altogether to disturbed cerebral circulation. In this connection he emphasizes the fact that the involvement of the ocular muscles is noted in the vertigo of Meniere's disease. This close relation between abnormal movements of the eye and aural vertigo have often been observed. Adler observed in one of his cases, referred to above, a quite perceptible movement of the eye during an attack of vertigo, and he believes that such abnormal movements are wont to occur in these attacks, but that they are too slight to be seen. He believes that, just as diplopia may prove the presence of a slight ocular paralysis, not visible to the eye, so the various subjective ocular symptoms occurring in an attack of vertigo may be much more delicate tests of abnormal movements of the eye than visible manifestations. Hughling Jackson even observed that mere pressure on the diseased ear in a patient subject to vertigo caused abnormal movements of the eye. Furthermore Hitzig found that the galvanic current, which produces vertigo by passing transversely through the head, causes at the same time movements of the eyeballs, sometimes nystagmus.

In explanation of the occurrence of vertigo from ocular disease Mendel supposes that the sense of innervation of the ocular muscles is disturbed, and the false sensations are projected into the outer world so that the latter appears changed. Therefore the sudden instinctive movements, etc. I may add, in further explanation, the discord between such sensations and those derived from

other sources, an explanation given above.

Mendel formulates his views in the statement that vertigo is a symptom complex consisting essentially in a disturbance of equilibrium brought on by disturbed functions of the ocular muscles. If the latter is not the seat of disease the proximate cause of the vertigo is to be found in transitory circulatory disturbance in the nuclei of the nerves of those muscles.

From the foregoing we cannot doubt the intimate relationship of the eye to attacks of vertigo, but, at the same time, we cannot agree with Mendel in denying the influence of the semicircular canals. The facts already adduced seem to incontrovertably prove the relation of the labyrinth to vertigo. We find, as further corroborative evidence, that attacks of vertigo are commonly attended by aural symptoms. In 94 of 106 consecutive cases of vertigo Gowers found deafness or tinnitus or both (1). Furthermore, when labyrinthine disease has progressed to that extent that there is no total deafness, the vertigo usually ceases altogether; indicating that the vertigo was caused by irritation of the nerve fibres in the semicircular canals, and ceased when those fibres were destroyed.

Whilst, therefore, we must grant both the ear and the eye a prominent part in the production of the manifestations of vertigo, it strikes me that the ear must be given the first place and that the eye is, rather, secondarily affected. Perhaps we should believe with Adler that objective vertigo—apparent movement of visible objects—is due to anomalous movements of the eye, and subjective vertigo—the feeling as if the individual were moving—is due to the labyrinth.

Other diseases or conditions that cause vertigo very likely do so indirectly through their effect upon these parts, especially on the labyrinth.

(1) It must also be remembered that the semicircular canals may be the seat of disease when there are no aural symptoms, for they are supplied by the vestibular nerve, whilst the nerve of hearing is distributed among the nerve elements of the cochlea. It is true that the limits of the labyrinth are so narrow that a lesion usually produces symptoms from all parts at the same time; but this does not always occur.

This is probably true of so-called reflex vertigo, of that from toxic causes, of gastric vertigo, etc. Doubtless in many of these instances the diagnosis is incorrect and the true cause is unrecognized, labyrinthine disease. In others there may already be an abnormal irritability of the labyrinth that needs but a trivial exciting cause to produce the attack.

In all instances the condition of the nerve centers is of prime importance, that is, the subcortical center of equilibration, or the higher, cortical, center wherein we must locate conscious sensation. In some instances a primary instability of these centers is a special predisposing condition requiring but slight exciting causes to bring on vertiginous attacks; in others, existing peripheral disease (usually in the labyrinth) secondarily established as instability of the brain centers, which becomes the most important pathological factor in the production of an attack of vertigo.

This secondary instability of the brain centers must always be kept in mind in considering the physiopathology of vertigo, as well as in the application of therapy.

A few words on some special clinical forms, though this brief sketch must necessarily be very incomplete.

AURAL VERTIGO.

Any disease of the ear may be attended by vertigo, but it is because it directly, or indirectly, effects the labyrinth. Reference will be made here only to well-defined labyrinthine vertigo. These cases are often spoken of as *Meniere's disease*, though it has been insisted on, on many sides that this term should be limited to that class of cases described by *Meniere*, in which there is a very acute process in the labyrinth, such as an acute and intense inflammation or hemorrhage. In some instances of this kind the symptoms are so sudden in onset and so severe that they simulate an apoplectic attack. In a severe paroxysm, in addition to the intense vertigo—sometimes so violent as to hurl the patient to the ground—there is likely to be tinnitus, deafness, nausea, and vomiting, pallor, and cold perspiration. The latter, may be, in part, due to the sense of terror which the attack usually inspires. Such

attacks may be of frequent or infrequent occurrence, or occur at irregular periods, while in the free intervals, milder vertiginous sensation, tinnitus and deafness, continue. Sometimes there is complete recovery, especially as to the vertigo. Commonly there is gradual progress in the aural symptoms until complete deafness results. With the occurrence of the latter, the vertigo usually ceases. Other cases of labyrinthine vertigo, of less severe type, have like symptoms, but in a milder form.

OCULAR VERTIGO.

Various ocular defects, hypermetropia, astigmatism, etc., have been noted as causes of vertigo, but the disease of the eye most clearly acting as a direct cause of such attacks is sudden paralysis of the external muscles of the eye, attended by diplopia. This vertigo is usually not severe and rarely persists for a long period of time. It may be avoided by covering the affected eye.

GASTRIC VERTIGO.

In general practice probably the majority of cases of vertigo are attributed to the stomach, a false diagnosis in most instances. According to Gowers less than 5 per cent. of the cases of definite vertigo are of pure gastric origin. But very likely in a much larger number some digestive disturbance is at least one factor in provoking attacks. We may make the diagnosis of gastric vertigo with the greater certainty the more distinct is the gastric disorder, and the less the evidence of the presence of more common causes. Gastric vertigo may be either mild or severe.

NEURASTHENIC VERTIGO.

Vertiginous sensations, more rarely distinct attacks of vertigo, belong to the most common manifestations of neurasthenia. The heightened instability of the nervous centers, so common to neurasthenia, may be looked upon as the basis of most of these manifestations. We may, in addition, find the common exciting causes gastric disorder, toxic contents of the intestines, impoverished blood aural disturbances, etc. In many instances the vertigo is distinctly of

psychic origin. For instance the cases of morbid fears—the “phobias”—where in a crowded theatre, a public square, or what not, the patient is suddenly seized with a sense of fear, usually attended by vertiginous sensations. This vertigo is mostly of the subjective type, and is, doubtless, of cortical origin.

VERTIGO OF ARTERIO-SCLEROSIS.

Vertigo is an important symptom of arterio-sclerosis. It is supposed to occur especially in its earlier stages. According to Huchard, the causes, which finally lead to arterio-sclerosis, in the beginning lead to transient spasm of the smallest arteries, a condition more likely to produce vertigo than the later permanent changes in the vessels. Mendel states that influenza, or other weakening influence, is especially likely to bring on vertigo in these cases. Not rarely in these cases tinnitus is, also, observed, and in some of them the real cause may be in the labyrinth.

VERTIGO FROM ORGANIC BRAIN DISEASE.

Vertigo is a common symptom of organic brain disease, most common with lesions of the medulla, pons, cerebellum and crura cerebelli. It is not necessarily severe, but most severe in case of lesions of the crura, which are likely to be attended, also, by forced movements. This vertigo usually ceases in the supine position. Commonly other symptoms of brain disease are found at the same time, especially, a reeling gait.

TREATMENT.

Just a few more words on treatment. Removal of external causes, tobacco, or other toxic agent, etc., remedying, as far as possible, bodily conditions, which are exciting causes, such as ocular defects, and stomach disorders; and attention to constitutional conditions, such as anæmia and neurasthenia, are self evident factors in treatment. In all instances the lessening of the irritability of the nerve centers is important, for which the bromides are the most promising drugs. They may be assisted by belladonna, aconite, phenacetin, etc. At the same time we must attempt to obtain a permanent improvement in this direction by a general tonic treatment.

Labyrinthine disease may be due to gout, rheumatism or syphilis, which would demand their appropriate treatment. Quinine and the salicylates have been recommended for the relief of labyrinthine vertigo, but probably will not often prove of value. Counter irritation by means of blisters or cauterization over the mastoid, may afford some relief.

The vertigo of arterio-sclerosis requires special attention to that condition. Small doses of the iodides, nitro-glycerine, stimulants, etc., are in place.

THE TREATMENT OF GOITRE WITH THYROID EXTRACT.

BY WALTER U. KENNEDY, M. D.,
TALULA, ILL.

I HAVE the pleasure of reporting that I have succeeded in entirely curing two cases of goitre and in markedly relieving four others by the use of thyroid extract.

CASE I. A man, fifty-one years of age. Upon careful examination I found that his condition was one of simple thyroid enlargement, i. e., without complication. He had taken the iodides internally and repeated applications had been made locally of tincture of iodine and the ointment of the red iodide of mercury, without beneficial effect. I placed him upon Parke, Davis & Co.'s tablets of thyroids, each of which represents five grains of fresh gland from the sheep. At first he took but one tablet, three times daily, gradually increasing the number to three tablets, three times a day. I observed no disagreeable effect upon the heart, even under the larger doses. In two weeks the improvement was quite apparent while the tumor had entirely disappeared in two months from the time the treatment was instituted.

CASE II. A woman of sixty-five years with a simple thyroid tumor, of recent growth, that interfered with respiration. The treatment consisted in the administration of thyroids (P., D. & Co.), one tablet three times a day. The number was increased at length to five tablets daily. At once marked improvement was noticeable, and in five weeks the patient was discharged, cured.

CASE III. Occurring in a woman aged thirty-four, was one of cystic thyroid. She was treated with potassium iodide and red iodide of mercury ointment with varying results for a month, when I began the thyroid treatment. One tablet of thyroids (P., D. & Co.), three times daily, constituted the dose at first. Later it was increased to two tablets three times a day. For a few weeks, improvement took place at which time the tumor ceased to reduce in size, although it was much smaller than when the treatment was instituted.

CASE IV. Also a woman, aged fifty-three, presented a simple thyroid tumor which was slowly growing. The thyroid treatment was, at first, of no avail. The growth seemed to be checked by the application of the ointment of red iodide of mercury. The use of the Thyroids (P., D. & Co.) which had been discontinued, was resumed when its effect was manifested by an appreciable reduction in the size of the tumor.

CASE V. A female of forty-six years, had evidently a cystic thyroid enlargement. I prescribed Thyroids (P., D. & Co.) which was taken for a week, and then I used —'s, in dose of two tablets three times a day. In three days the pulse became irregular, rapid and weak; other symptoms, such as dizziness, congestion of the face and great weakness supervened. I at once discontinued the use of the Thyroids and gave digitalis, under the administration of which the patient rapidly improved. Once more the Thyroids was prescribed, but no marked effect upon the tumor was observed until local applications of red iodide ointment were made.

All of my cases were uncomplicated, there being no tachycardia or exophthalmos in any case. In fact they were ideal cases for experimental study. In my experience thyroid extract is apparently not of service in cystic degeneration of the gland. In that condition the mercurial is more efficient. I do not believe that any cystic goitre can be entirely cured by the use of thyroid extract alone. I also have found it useless to depend upon the internal administration of iodides.

It is my opinion that the only remedies of value are thyroid extract and red iodide of mercury ointment, and with these results were always apparent in a few weeks.

XEROFORM IN ARMY SURGERY.

BY EMILIO P. NOGUERA, M. D.

Surgeon-in-Chief of the Spanish Army Sanitary Corps,
Chief of the Surgical Clinic at the Army
Hospital at Jimenez (Cuba).

DURING the Cuban war I had the opportunity to employ xeroform in a great number of wounds, occasioned both by bullet and by steel.

Bullet wounds, first cleansed by means of abundant irrigations with a 1:1000 sublimate solution, taking care to reach all their recesses and sinuosities. Then I applied a thin layer of powdered xeroform at the points of entrance and exit of the projectile, and covered both with sublimate gauze and carbolyzed cotton. The dressing was only changed after it had become saturated with discharge. I obtained cicatrization in the shortest possible time, and without supuration.

I irrigated sword wounds in a similar manner, sutured them, covered the incision with a layer of xeroform, and applied a bandage. In this way I obtained cicatrization by first intention in every case, and without the appearance of any accident or complication. The time required for the process varied between one and three weeks, in accordance with the size and the depth of the wound. This is an extraordinarily short time for the climate of Cuba.

For contused wounds, with loss of substance, in which approximation and suturing of the margins was impossible, the time required for healing under the xeroform dressing was longer (36 days). But the lesions remained dry and aseptic after the first dressing; they became covered with healthy granulations in a very short time; and I never noticed a single drop of pus or the slightest irregularity in the process during the entire time of observation. Soft, spongy, moist and exuberant granulations never occurred under the xeroform dressing; it is notorious

that they often happen with iodoform dressing, and have to be removed in the usual manner.

Xeroform did me very valuable service when large numbers of wounded had accumulated, since it dried up the moisture secreted from the exposed surfaces, and sterilized them. I could thus delay treatment, when unavoidable, for from three days to a week without fear of secondary infection of the traumatic lesions.

I had no occasion to use xeroform upon the battle field itself; but I made careful observations in the hospital to determine whether the drug really fulfilled all the indications for a dry dressing, which is the easiest and most practical treatment at the front. I selected three cases of gunshot wound in which there was no damage of important organs, and which had just been brought into the hospital. I cleansed and dried the accessible portions of the wounds with pledgets of cotton, dusting xeroform upon them, and covered them with cotton tampons impregnated with xeroform, wrapped in gauze, and again powdered with the drug. The tampons were kept in place by a dressing of carbolized cotton and sublimate gauze, which in one case was allowed to remain in situ for two, and in others for three days. I had the satisfaction to find all the wounds entirely aseptic when the dressings were removed. This is practical proof of the fact that this simple xeroform dry dressing can be employed upon the battle field itself to keep wounds antiseptic for from two to three days; a length of time more than sufficient for the removal of the patients to the hospitals.

Finally, I can testify that I never saw any symptoms of intoxication of the general system, or any local changes that were due to the employment of the xeroform.

My observations entitle me to draw the following conclusions:

1. Xeroform is a powerful antiseptic for wounds, and is capable of being of the very greatest service in military surgery.

2. It absorbs the secretions from the bleeding surfaces, sterilizes them, and renders the wounds absolutely dry and free from the germs that

are capable of causing secondary infections.

3. Since the very simple dry xeroform treatment above detailed maintains wounds aseptic for 48 hours and longer, it is absolutely irreplaceable for first treatment on the battle field and during the accumulation of patients in emergencies in hospitals deficiently supplied with personal. For it permits postponement of the treatment without any danger to the patient.

4. In wounds accompanied by loss of tissue it favors cicatrization by the small, firm, and regular granulations that it promotes, and it never causes the appearance of the soft, spongy granulations that so often follow the employment of other antiseptics, more especially iodoform.

—:O:—

CONTAGIOUSNESS OF TUBERCULOSIS AMONG ANIMALS.—MOUSSU (*Brit. Med. Jour.*) gives the results of his investigations with reference to the contagiousness of tuberculosis among animals. His experiment consisted in exposing to direct tuberculous contagion several animals of different species by placing them in the same building with tuberculous cattle. The animals exposed were healthy. There were seven cattle, seventeen goats, two sheep and one pig. It was interesting to note that before any clinical signs of the disease were manifest, all the cattle reacted to the tuberculin test. Six of these animals were killed and all were found to be tuberculous. Of the seventeen goats, some reacted distinctly on being subjected to the tuberculin test; the others were shown by post-mortem examination to be tuberculous. The two sheep reacted to the test. The pig had been bitten on the thigh, and was infected at the point of inoculation. The length of stay of all animals in the building varied from five months to one or two years.—*Modern Medicine.*

LAXATIVE FOR INFANTS.—

R Syr. mannæ, 3 vj.

Syr. rhei aromat., 3 iij.

M. Sig. One-half to one teaspoonful.—*Louisville Med. Mon.*

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Editorials.

ENZYMES AND GERM DISEASES.

THE recent investigations of Dr. Loew, who, in conjunction with Emmerich of Munich, has been devoting himself recently to germ diseases, bid fair to be productive of some practical results.

The nature of the same may be gathered from the following report which has recently been submitted:

"The treatment is similar in some respects to the serum treatment, but depends on a different principle, the basic idea being the presence of a class of ferments known as enzymes, which are produced by the same bacteria that produce the disease. It is because of the production, or rather overproduction, of a certain enzyme that a disease such as typhoid will 'run its course' and then die out of the system. The bacteria in this case, it is stated, are simply killed out by the ferment they produce. The object of the new treatment is to produce a pure enzyme, which, introduced in the human system, will kill the disease germs without injuring the patient. This differs from the principle of inoculation for smallpox and other diseases, where the object is to give the patient a mild type of the disease to render him immune to the more virulent form."

As regards the general utility of these enzymes it is claimed that they are the product of most, if not all, the disease germs, and that the ordinary diseases of this character, as well as the more virulent ones, like

cholera, anthrax and the like, are amenable to their antitoxic effects:

From the information thus far accessible we may expect from this new product more satisfactory results than have been heretofore obtained by antitoxin and similar agents.

IS THE NEW WOMAN RETRO-GRADING?

WHILE a short time ago nothing was too good or too advanced for the latest product of womankind, we now hear in various quarters remonstrances and warnings, and assertions that the advancement has been more fancied than real.

Higher and collegiate education received a sort of knock-out blow a short time ago at the hands of a prominent Boston clergyman, who contended, we believe justly, that advanced mental culture was acquired at the expense of many of those physical and mental qualities which rendered their possessors womanly and attractive. So great a fad has this kind of education become that no one stops to make comparisons and estimates, but now that it has been mentioned, not a few will be able to recall instances in which the experiment has been productive of much more harm than good. It behooves parents to decide what form of training or education best fits the daughter for her mission in life, and what best promotes her future health and happiness. The opinion has already been advanced that Greek and the higher mathematics won't do it, but that many are strangely and woefully lacking in the practical knowledge which pertains to the every day duties of life. Perhaps it would be better under the circumstances to have them taught something more of the useful and practical and that with due consideration of their physical needs and necessities.

As a contribution to the other side of the question, we may mention an article in the "Nineteenth Century," in which the writer takes the ground that many of the out-of-door sports as commonly indulged in by women are being carried to excess, and that these have an injurious effect upon both their physical and mental advancement.

This objection is, in fact, directed against collegiate institutions where physical exercise is often carried to extremes, and where competition is almost as fierce as in colleges attended by the other sex.

Recognizing the importance of physical exercise we believe the views taken by the writer of the latter article are somewhat extreme. A far greater danger seems to us to lie in the considerable mental and bodily strain entailed by the extensive curriculum of the female college, which tends to overstimulate the brain and weaken the muscular and nervous systems.

In short, the ideal educational system, as regards women, has not yet been formulated and the present generation is waiting—and suffering while it waits.

—:O:—

After Office Hours.

VII.

THE doctor had just returned from a protracted visit upon a mother whose first-born had recently swallowed a button, and even the mixture which Mathilde was wont to administer in various mental and physical emergencies, scarcely sufficed in this instance to restore the late arrival's customary equanimity.

"Isn't it strange," said Budweiser, throwing his medicine case on to the sofa, and kicking his overshoes into a dark corner, "that one-half of our cases are composed of ailments which are trivial and commonplace and wearisome, but are nevertheless the very ones which occupy the most

time and give us the most trouble. It is more satisfactory to prescribe than to preach, and far easier to give medicine than to combat the fears and prejudices of our clients. These people always want things explained, and forthwith they begin to present facts and figures to prove that you don't know what you are talking about.

The novice in medicine—or rather the art of satisfying people—is apt to tell things as they are and to withhold drugs when they are not indicated, but the chances are ten to one that such a man will die of starvation or melancholia before attaining his majority. Those who attend his funeral, however, will exclaim with one accord: 'What a good man he was! How much we shall miss him!' But, unfortunately, that doesn't support his family for any length of time, and, as the widow turns over the ragged leaves of the old books in search of a collectible bill, she reads between the lines of the ledger the old and suggestive story of faithful service and glaring inconstancy—of self-sacrificing devotion to duty and miserly appreciation—of long continued effort and meagre reward. A life work wherein his gifts to mankind are recorded with an iron pen, but where the records of kindly recompense are as though written on the shifting sands.

The reason why this mulled ale isn't a favorite is because they don't make it right. It must be new and the carbons must be burned out quickly—"and the doctor who had been quietly heating a poker in the coals of the fireplace now proceeded to work the necessary transformation in the solution before us.

"As I was saying, there are thousands of people on the streets to-day eagerly waiting to be deluded, and no form of deception is too low or too transparent to drive them away from the booth of the fakir. Now, what shall he do with these degener-

ates? Who will offer to win them over to Christianity at his own expense? Who will be courageous enough to tell them the truth? The task is apparently a hopeless, and certainly a thankless one. You know what Schiller said: 'Mit der Dummheit Kämpfen die Götter selbst vergebens.'

'Against stupidity the very Gods
Themselves contend in vain.'

I am sure no one could express it any better."

"Yes," I replied, "the quacks and mountebanks know how to manage them far better than the regulars."

"That's so! but now that you mention it, I'd like a description of the real *bona fide* regular so that I may know him the next time we meet. I had supposed him to be somewhat of a myth. Is it his professional attainments or his personal views and characteristics which decide the question? For example, take Mc-Pheeters, the gynecologist. Now, he is known as a regular and would be deeply grieved over any reflections upon his loyalty to the true flag, for I've often heard him declaim in a most earnest way against the ungodly practices of those outside the pale. Yes, I remember when the doctor began practice, and what a stickler he was for the code, which you know are the medical commandments which were handed down to us from Sinai on tablets of stone.

Well, the first thing he did was to deliver an address before a semi-religious convention on 'What Our Granddaughters should know,' which was couched in such chaste and eloquent language that it drew tears from the eyes of several maiden ladies on the front seats and made him forever solid with the pure in heart.

I didn't hear anything more from him until several weeks after, when he read a paper before our Society on 409 cases of hysterectomy performed for the relief of dysmenorrhoea, which several specialists in

other departments, to whom he had turned over cases, said was one of the brightest and most suggestive papers they had ever listened to. Well, the reports got around in due season and I can truly say that the type and general get-up left little to be desired."

"Did he enclose a blank form for contract work?" I inquired, but the speaker was busy heating up the poker for another display of pyrotechnics, and my question remained unanswered.

"Soon after there appeared in an evening newspaper a column article describing in detail one of his highly technical operations, in which his brilliant attempt to outwit the Grim Destroyer was portrayed in a way calculated to hold the attention of the most casual reader. The compositor who set it up told me afterwards that the sketch was a dandy, but that the doctor's spelling was about the queerest he ever *did* see."

"But all this must be professional, or the members of the State and National Societies would not endorse him so highly," I said.

"Oh, dear, yes," rejoined he, with an air of resignation over my apparent ignorance; "but just let a regular once visit a case in counsel with a homœopathic physician, however honest and exemplary the latter may be, and forthwith there arises lamentation and great mourning, and his confrères indulge in all sorts of hysterical demonstrations and absolutely refuse to be comforted."

"I suppose they consider him a quack and unworthy of support."

"Yes, but what is quackery? The dictionaries define it as ignorant pretension or fraudulent practice—what was that I saw about it the other day?" And the doctor finally fished out from a collection of old books reposing in a basket on the floor, a volume of South Sermons, wherein an old theologian quaintly remarks: "Quacks and mountebanks are doubt-

less a very dangerous sort of men—they are both of them always very large in pretence and promise, but short in performance and generally fatal in their practice."

"Now in order to sustain our position we must prove that these so-called irregulars are ignorant or fraudulent—at least, less so than ourselves. Such a task, however, may prove a difficult one when we consider the character of their medical schools and examine a curriculum which is so nearly identical with our own. Intelligent men who have devoted years to systematic medical study cannot be termed ignorant. Occasionally they cure some of our own cases, you know. And so far as dishonesty goes—well, we won't say anything about that till after the second Reformation comes along."

"But what about the regulars with shady reputations?" I asked.

"Why, I hold that the school has nothing at all to do with this question. A good man is worthy of respect and recognition whether he lives on our side of the street or not, and the ethical quack should be discouraged, no matter what society endorses him. I'd rather consult with a conscientious idiot than a tricky regular any day in the week. No, let us oppose the attempt of medical trades-unions to hinder the free exercise of personal rights and convictions, and let character and ability form the fundamental principles which should govern our professional intercourse. What did St. Augustine say? 'In necessariis unitas, in dubiis libertas, in omnibus caritas.'" And the counsel for the defence raised the temperature of the mixture 21 degrees by the addition of a strong dash of Paprika.

"Now don't get into the way of thinking that your way of treating a fever is the best, or that your surgical attempts are destined to produce a revolution. Better men than you have spent their lives on these very

things and then they weren't sure. What we believe to-day we doubt to-morrow, and if any one thoughtlessly reminds us of our early opinions, we turn up our noses and assert, with uplifted hand, that we never believed in any such thing. Of course in these latter days of specialism we are not supposed to know very much. We are called upon to act only as a distributing center and a medium of communication. But let us give thanks that measles is left to us and that we are graciously permitted to guide our babies through the complicated process of teething without a single remonstrance on the part of the more enlightened."

"But what do you do with the rectal cases, Doctor?"

"Oh, you want my views on Proctology, do you? Well, of all the minute subdivisions of practice this is the most infinitesimal. When the Orificialist came to town I didn't say a word, for I thought we had reached the limit, but when the Proctologist put *his* uniform on and got together some more little boys and started a society, why then I *ris up* in my wrath and put some fresh naphtha into the Pacquelin and swore by the beard of the Prophet that I'd fight the thing to the bitter end. How satisfying to the poetic nature to pursue the daily routine of such cases! How diverting to wander, fancy free, over venous engorgements and along the path of the serpiginous ulcer! What an abnormal mental capacity is required to grasp the details of so great a subject! My only fear is that he will trespass on the field of some other worthy practitioner. In fact, I heard the other day that he had had words with a gynæcologist over a case of recto-vaginal fistula, but I don't know what came of it."

"Perhaps they divided the fee," I suggested.

"No, no, that couldn't be, for in that case the man who sent it in would get no commission."

"Do you know what they are paying now?" I inquired.

"Oh, about ——— what is necessary," he replied.

Budweiser appeared as though about to make some further observation, but after a strong effort at self-suppression, he arose, and walking to the mantel piece, proceeded to wind up the clock.

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Book Notices.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otolology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penn.), Philadelphia; Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania; Professor of Clinical Medicine in the Philadelphia Polyclinic; Fellow of the College of Physicians of Philadelphia. Volume I, Ninth Series. 1899. Philadelphia: J. B. Lippincott Company 1899.

We find thirty-eight contributors to Volume I, Ninth Series, embracing thirty-six subjects grouped under the heads: Drugs and Remedial Agents, Treatment, Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology and Dermatology.

It is a fitting companion to the volumes that have preceded it.

TWENTIETH CENTURY PRACTICE. AN International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In Twenty Volumes. Volume XVI. "Infectious Diseases." New York: William Wood and Company. 1899.

This volume deals with "Infectious Diseases," and there are ten contributors as follows: John Winters Brannan, M. D., New York; Landon

B. Edwards, M. D., Richmond, Va.; Otto G. T. Killiani, M. D., New York; A. Netter, M. D., Paris; Henry Alfred Alford Nicholls, C. M. G., M. D., C. M., M. R. C. S., Dominica, W. I.; Leo Popoff, M. D., St. Petersburg; Andrew H. Smith, M. D., New York; A. A. de Azevedo Sodre, Rio de Janeiro; John S. Thacher, M. D., New York; Ernst Zeigler, M. D., Freidburg, i. Br.

We find treated, extensively, lobar pneumonia, cerebro-spinal meningitis, dysentery, yaws, inflammation, erysipelas, simple continued fever, relapsing fever, typhoid fever. In addition an elaborate index which adds very much to the value of the volume.

There can be no question of the position which the "Twentieth Century Practice of Science" has taken with the medical Profession. The high standard of excellence in typography, illustrations and binding, together with the eminent character of the contributors, men who have been selected for their vast experience, both as clinicians and authors, assured for the series widespread attention.

The volume before us is a fitting addition to those which have gone before, and will only add further laurels to the series.

A TREATISE ON HUMAN PHYSIOLOGY for the Use of Students and Practitioners of Medicine. By Henry C. Chapman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia. New (2d) Edition Thoroughly Revised. In One Handsome Octavo Volume of 921 Pages, with 595 Engravings. Cloth, \$4.25, *net*; leather, \$5.25, *net*. Lea Brothers & Co., Philadelphia and New York.

So well known is this work that it is only necessary to say that while the plan and arrangement which have proved so satisfactory remain unchanged, every page shows the revision necessary to represent the present status of its highly developed subject. Especially will these changes be noted in the section on the Nervous System, and wherever necessary to show the great advance recently made in the field of Physiological Chemistry. The author's vast experience as investigator, clinician

and teacher have enabled him to furnish a comprehensive, clear and modern book, intelligible and readily grasped by the student, and especially valuable to the practitioner because of its close bearing upon pathological as well as normal conditions. Though in size and number of illustrations the new edition equals its predecessor, it has been found practicable to issue it at a notably lower price.

PUBLIC HEALTH REPORTS (FORMERLY of Sanitary Reports). Issued by the Supervising Surgeon-General Marine Hospital Service Under the National Quarantine Act of April 29, 1878, and the Act Granting Additional Quarantine Powers and Imposing Additional Duties upon the Marine-Hospital Service, Approved February 15, 1893, Vol. XIII—Nos. 1 to 52. Washington Government Printing Office. 1899.

This volume includes Nos. 1 to 52 of the "Abstract Sanitary Reports" for the year 1898, and show the excellent work being done by the Marine-Hospital Service under the superintendence of Dr. Wyman.

When one looks over this volume it is not difficult for us to understand why this branch of the Government service ranks so high both abroad and at home.

PROGRESSIVE MEDICINE, VOL. II. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, Handsomely Bound in Cloth, 472 Pages, 56 Illustrations and 3 Full-page Plates. Lea Bros. & Co., Philadelphia and New York.

The second volume of "Progressive Medicine" presents carefully prepared and exhaustive papers upon the following subjects:

Surgery of the Abdomen, Including Hernia, by William B. Coley, M. D., of New York City; Gynecology, by John G. Clark, M. D., of Philadelphia; Diseases of the Blood, Diathetic and Metabolic Disorders, Diseases of the Spleen, Thyroid Gland and Lymphatic System, by Alfred Stengel, M. D., of Philadelphia; Ophthalmology, by Edward Jackson, M. D., of Denver.

This volume shows more clearly than even the previous issue that in Progressive Medicine the practitioner possesses a narrative statement of the scientific progress of medicine made for him on a plan quite different from any of those heretofore employed. There is the personal element in every page of the book. Given certain subjects, men who are special authorities therein, have deliberately set themselves the task of forming definite conclusions as to the value of the progress made in each, and have furnished the data for these conclusions, not in useless detail but with sufficiently full statement to make the subjects clear. Such a personal presentation involves mature thought; large experience and most careful handling on the part of the authors, but it is the ideal method of recording useful knowledge for the prompt service of the busy practitioner.

The high literary and scientific standard set by the first volume is amply maintained, and the several sections appeal to the reader by their very practical character. Thus in one convenient substantial volume, beautifully printed and abundantly illustrated, is given in practicable shape that which the busy practitioner requires for an intelligent comprehension of the real advance in medicine.

The warm welcome with which the first volume of Progressive Medicine was received is easily understood, and this second volume will surely increase the rapidly growing popularity of this quarterly.

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AORTIC REGURGITATION WITH MITRAL STENOSIS.—

℞ Tinct. strophanthus,
Tinct. nucis vomicæ,
Tinct. digitalis, aa parts aeq.

M. Sig. Gtt. xx to xxx t. i. d.—
Thompson, Louisville Med. Mon.

AORTIC PALPITATION.—

℞ Quinine hydrobromide, gr. 60.
Powd. digitalis,
Ext. of convallaria, aa gr. 30.

M. Divide into forty pills. From two to four to be taken in the course of twenty-four hours.—*N. Y. Med. Jour.*

Current Literature.

"The Absolute Necessity of Standardized Preparations." Reprint of Editorial in *Bulletin of Pharmacy*.

Blackwood's review of the Autobiography of Mrs. Oliphant is reprinted in *The Living Age* for July 1.

"Urotropin in Cystitis," by J. B. McGee, M. D. Reprinted from *The Bulletin of the Cleveland General Hospital*.

"The Standardization of Drugs and the Forthcoming Revision of the Pharmacopœia." Reprint of Editorial in *Medicine*.

"Modern Possibilities in Chronic Catarrhal Deafness," by Sargent F. Snow, M. D. Reprinted from *The Laryngoscope*.

"The Neuropathic Origin of Stuttering," by W. Scheppegegrell, A. M., M. D. Reprinted from *Philadelphia Medical Journal*.

"The Needs and Rights of Old Age," by I. N. Love, M. D. Reprinted from *The Journal of the American Medical Association*.

"Judicial Methods. Medico-Legal Testimony. The Zelner Case," by John V. Shoemaker, M. D., LL. D. Reprinted from *The Medical Bulletin*.

"Woman. From a Doctor's Sentimental Standpoint," by I. N. Love, M. D. Reprinted from *The Journal of the American Medical Association*.

"Congenital Atrophy of Cerebellum. A Rare Case," by C. G. Hubbard, M. D. Reprinted from the *Journal of the American Medical Association*.

"Treatment of Post-Operative Conditions," by Emory Lanphear, M. D., Ph. D., LL. D. Reprinted from the *American Journal of Surgery and Gynecology*.

The serial attraction of *The Living Age* for the summer months will be a story by "Neera" one of best-known

of contemporary Italian writers. It is called "The Old House" and the opening chapter, in the number for July 1, is full of color and romantic charm.

"Appendicitis. Observations on Sixty-Two Operations in the Attack, with Two Deaths," by George W. Crile, M. D. Reprinted from the *Cleveland Medical Gazette*.

A subject which is just now uppermost in many minds, The Ethics of War, is the subject of a thoughtful paper by the Rev. Father Ryder in *The Living Age* for July 1.

"A Rapid and Successful Treatment of Chronic Ulcers of the Leg," by A. H. Ohmann-Dumesnil, A. M., M. D. Reprinted from the *St. Louis Medical and Surgical Journal*.

Arthur Symons's appreciation of Balzac, which *The Living Age* reprints from *The Fortnightly Review*, is one of the freshest and most sympathetic of recent contributions to the study of Balzac.

"The Medical Expert's Duty and Where He Most Frequently Fails in It, with Illustrations from the Zelner Case," by John V. Shoemaker, M. D., LL. D. Reprinted from *The Philadelphia Medical Journal*.

"Naphthalin in Typhoid Fever a Remedy Preventing Intestinal Putrefaction and Tympanites," by Albert Woldert, Ph. G., M. D. Reprinted from *The Journal of the American Medical Association*.

Magazine-readers of the summer months must be hard to please if they cannot find many articles of great interest in *Self Culture* for July. The half-tone pictures are particularly well chosen and printed, and present views and portraits that really "illustrate" the articles. "American Landscape Painters" has portraits of four representative artists, and a sketch of "Jean Racine and His Age" shows the great dramatist in the resplendent but cumbersome wig of the time of the Grand Monarch. The descriptive articles present fine views of the island of

of Santa Catalina;" "The Smithsonian Institution;" and "Life on the Viga;" while "How the Handwriting Expert Works" not only explains his methods, but in a very clear photographic reproduction of a "raised" draft shows the various steps taken by the forger in the first place, and the subsequent modes of detection adopted by the convicting expert.

Thoughtful papers on "The Race Problem at the South" by Dr. Goldwin Smith; on "The People and Politics" by the Hon. Boyd Winchester; on "The Dominant Sea Power" by Leslie J. Perry, give food for reflection on prominent subjects of the day; and in view of the advanced age and precarious health of Leo XIII an account of "Pope-Makers and Pope-Making" by the Rev. Edmund Guilbert, describing the methods of creating cardinals and the work of the Conclave, is timely and of great interest.

An amusing paper by F. W. Fitzpatrick, entitled, "Fashion's Slaves," with pen and pencil drawings by the author, criticises freely the vagaries of Dame Fashion and her feminine devotees. A well-drawn silhouette of the true feminine form (the correct dimensions of which are given) stands side by side with a reproduction of a modern fashion-plate figure, and the reader is invited to attempt the fitting of the latter's dress, with its nine inch waist, over the natural, uncompressed, twenty-eight inch waist of the model.

Papers on "How the Black Rubs Off;" "The Fourth of July;" "About Diamonds;" "Morality in Art;" "The Death of Castelar," etc., go to make up one of the most interesting magazines of the month. The usual departments are filled with good things,—notably an article entitled "A Gossip on Gossip."

JULY LADIES' HOME JOURNAL.—With its infinite variety of excellencies, the *July Ladies' Home Journal* appeals to every taste and touches upon every interest. It opens with the "Most Famous Little Town in America," which pictures many interesting spots in historic and literary Concord. There is a delightful view of social life in the Colonial days in "When Washington Was Married,"

which brings to light many new, interesting facts. A series of almost incredible narratives in "The Moonlight King" tells of the follies and eccentricities of Ludwig II of Bavaria. The gifts to our government from foreign powers are described in "Presents That Have Come to Uncle Sam." Ian Maclaren discusses the pulpit and the pew in an article on "How to Make the Most of Your Minister" and Katharine Roich writes of "The College-Bred Woman in Her Home."

The fiction of the *July Journal* includes a continuation of Anthony Hope's serial, "Captain Dieppe," the conclusion of "A College Courtship," the second of "Ol Peckham's Opinions," and a humorous portrayal of "The Valor of Brinley," by John Kendrick Bangs. "Entertaining in the Country," "How to be Pretty Though Plain," "What it Means to be a Dressmaker," "Birthday Parties," "A Boys' Club House on the Water," are some of the seasonable, practical features. Mrs. S. T. Rorer writes on "Hasty Eating and Hurried Meals" and "Cooking Over All Sorts of Fuel," and Maria Parloa describes the pictures new and effective labor-saving devices for the home. "The Gossip of a New York Girl" details the very newest fancies in feminine attire, and "Pretty Stuffs for Midsummer Frocks" are described. Two pages are devoted to "Floral Porches and Vineclad Cottages," an attractive feature filled with suggestions for every homekeeper. By The Curtis Publishing Company, Philadelphia. Ten cents per copy; one dollar per year.

LIPPINCOTT'S MAGAZINE FOR JULY, 1899.—*Lippincott's Magazine*, which starts on an entirely new career with the July issue, brings out—complete—a Japanese novel, by John Luther Long, the author of "Miss Cherry Blossom," "Madame Butterfly," etc. "The Fox-Woman" deals with the half-humorous, half-pathetic infatuation of a little Japanese artist for a wilful American beauty, who never realizes the tragedy she heartlessly compels.

"The Teller," by the author of "David Harum," and the only existing fiction left by Edward Noyes

Westcott, is a story in which the pathetic incident—the all-mastering tragedy—of everyday life is treated with a power never surpassed and seldom equalled in contemporary literature.

There are also valuable and timely papers contributed by the following well-known writers: Anne Hollingsworth Wharton's first of two articles on "The Salon in Old Philadelphia;" Sara Y. Stevenson on "What are Women Striving for?" Henry Wilton Thomas on "The Building of a Trust;" Charles S. Clark on "A Practical Submarine Vessel" (The New Argonaut); George J. Varney on "Self-Propelled Street Vehicles," and Ernest Ingersoll on "Small Deer;" Charles M. Skinner writes "The Cited: A Legend of Havana."

James Whitcomb Riley's new poem, "A Song of the Road," has the true flavor of this popular writer's ability to touch the hearts of his readers.

Verse is also contributed by Francis Howard Williams, "On the Maine Coast," and by Lizette Woodworth Reese, "The Cry of Rachel." Unusually strong poems, both.

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Correspondence.

CONCERNING OPTICIANS.

Editor New England Medical Monthly:

The following resolutions presented by Dr. Louis J. Lautenbach, of Philadelphia, Pa., and supported and seconded by Dr. S. S. Towler, of Marionville, Pa., were unanimously adopted by the Medical Society of the State of Pennsylvania, on Wednesday, May 17, 1899, at Johnstown, Pa.

RESOLVED, that it is the opinion of the Medical Society of the State of Pennsylvania that opticians are not qualified by their training or are they legally qualified, to perform the work of the oculist, and they should not be the consultants of regular physicians. Further it is

RESOLVED, that all physicians are requested to call their brother physicians in consultation, thus discountenancing the growing pretenses and assurances of the optician and his brother, the graduate optician, or, as he is beginning now to call himself, the "Ophthalmotrician."

It is the purpose of the undersigned to present similar resolutions substituting "American Medical Association" for "Medical Society of the State of Pennsylvania" for adoption by the American Medical Association at Columbus, on Tuesday morning, June 6, 1899.

It is hoped that you will in every way possible promote their passage, that you will vote and work for the same if present at the meeting, influencing your friends who expect to attend to do the same, and if possible send the resolution as passed by the Medical Society of the State of Pennsylvania to such medical journals as you think will best promote the purpose intended, with the view of having them present this matter in their editorial columns. I am,

Yours truly,

Louis J. Lautenbach, M. D.
1723 Walnut Street.

THE RECENT TYPHOID EPIDEMIC IN PHILADELPHIA.

Editor New England Medical Monthly:

The epidemic of typhoid fever that fell upon Philadelphia so fatefully the past winter and spring, has aroused very considerable comment among physicians and editors in this and other cities, and we of the stricken city must acknowledge, while thanking other communities for their sympathy, that there is an apparent excuse for the universal condemnation of the water supplied to our citizens.

There is no mistake that the population has increased very considerably in the last fifteen years, but there is misinformation in the statement that the facilities for supplying water have not been increased, but have become worse in that space of time. There have been at least two fine new reservoirs put in operation in the suburbs where the water can be procured from the river which has constantly contributed water for the people for more than a hundred years. If that river was therefore accountable for the typhoid epidemic of this year, it must certainly have produced the same conditions to the community, if not annually, at least periodically, for a considerable portion of that period. Yet upon comparing statistics of former times we

find that Philadelphia has borne the name of being one of the most healthful cities of the eastern section of the United States. A few years ago there was a local epidemic of the same disease, but the cause was discovered and uprooted immediately, and for it the Schuylkill could not be held responsible in the least degree, as it arose in a creek not tributary to the river, but emptying directly into an imperfect sewer connection.

Unfortunately the Schuylkill is submitted to certain impurities, that, while not disease producing, may be aggravating to those who drink it without filtering or settling. After rainy seasons the water has always been more or less affected with the mud and coal dust that are washed down from the hills and mining districts; but a few days, sometimes only a few hours, has restored it to its clear color and good taste. But naturally the increased work in the mines along the tributaries has made the piles of culm or mine dust, larger and presented greater space over which the rains can wash, then too, the drives along the beautiful banks have furnished on the one side the dust from the otherwise excellent cinder road, on the other the reddish mud from the sand and gravel artificially added to make a smooth surface. This latter difficulty was unfortunately not sufficiently discussed when the exquisite drives were opened in Fairmount Park.

The conditions are unpleasant, for the mud and dust run directly into the fore bay and are pumped into the reservoirs immediately adjacent. There are few or no disease germs in these impurities, nor would they even annoy the consumers if people did not become agitated for fear of a water famine if the reservoirs are closed off for a time to permit this wash to settle. The matter can be partially provided against by slanting the drives slightly inward from the river and directing the rainfall into a series of continuously connected channels until it reaches the river below the Fairmount dam, after which it can do no possible harm as the supply of drinking water is procured entirely from above the dam. The task of making the channels may appear stupendous, but they will

require far less work than building new drives and keeping them in repair on the river side. There would be no danger of unsightly runnels, for the rain courses could be kept clear of débris and the only time water could flow in them would be during rain storms. The dust from the mine waste has been under legislative and legal consideration several times and improvement has been made; but there is no doubt that it will take considerable time yet to overcome the trouble entirely. Still while the coal dust and clear mud enter the water the danger of infection is at the minimum; and as the sewage is prevented from flowing into the river by stringent laws, well enforced, we must claim that our historically beautiful Schuylkill is not to blame for the deplorable epidemic.

Having forcibly asserted that fact, we must yet own to the presence of the disease and turn to some other reason for its appearance. There is neither doubt or obscurity about it. The infection was brought to us by the sick fever-stricken soldiers returning from the unsanitary camps all through the country and the fever-laden low areas of the far south and the West Indies. Nor do we desire to throw undue blame upon either the localities or the men who fought, or were willing to fight for the honor of their country and liberation of Cuba.

Under pressure of circumstances encampments were laid in very unhealthy locations and with unsuitable drinking water supply. Men were unused to the atmosphere and surroundings and they contracted low fevers which gradually developed their respective forms of disease such as typhoid, the camp typhus and the typhous type known as cerebro-spinal meningitis, malarial and other less dangerous types. Others, pushing on into the harbors and swamp lands of the islands attained more virulent types of the same fevers or contracted in Cuba, the dreadful scourge, yellow fever. This latter, being expected, was more carefully guarded against thus preventing its addition to the epidemic diseases innocently imported into our city. The question arises, why did Philadelphia suffer more than other places if this was the case?

Because it was a landing centre for the sick and wounded. Our hospitals were thrown open to them, our ambulances were used for them, and very many of the soldiers had their homes among us. Weary, sick and often wearing the uniforms that had been again and again saturated with the infectious water of the swamps, they were welcomed home with open arms. The sick generally recovered rapidly because of the change of diet and better climate surroundings and the sanitary and tender care they received. The germs which they unconsciously carried home and into hospitals set out upon their direful mission without delay, and because of the absence of suspicion of their presence, with very little opposition. Thus Philadelphia planted the typhoid germs in every general hospital of the city and if those germs had not propagated rapidly and produced an epidemic would have been quite miraculous just as if the germs of Asiatic cholera or of yellow fever or variola once admitted would not follow the same course. It will be noted that physicians generally did not place the blame upon the Schuylkill water. It was agitated at first by a few individuals and then energetically in the daily press, but gradually it swelled into a semi-political discussion, which as it increased in volume added more and more to the terrors of partaking of the water. Undoubtedly the river and reservoirs require to be protected from pollution, but there are very few great cities, in size and population comparable to Philadelphia that can boast throughout the greater part of the year of an average purer or more abundant supply of water.

As the matter has become subject to political interference our citizens will require that known evils shall be corrected and adequate improvements made. In the meantime, as an interested party, it is my duty to disclaim the assertion that our daily supply of drinking water was responsible for the late dangerous epidemic when the other, more tangible and unquestionable cause was here for any interested scientist to investigate to his entire satisfaction.

Apologizing for the length of my reply to your editorial, I am,

Sincerely and respectfully yours,
Bushrod W. James, M. D.

Abstracts.

DRUG STANDARDS PHYSIOLOGICALLY FIXED.—At the Columbus meeting of the American Medical Association the *Materia Medica* Section gave considerable time and attention to the nomination of the committee of the Association which will co-operate in the revision of the United States Pharmacopœia next May. In addition to the nomination of the committee much thought was given to the statement of principles which it was suggested the committee should advocate. Chief among these was the subject of giving official sanction to the standardization of drugs.

As a principle this was recognized in the last revision of the pharmacopœia in 1890, by the establishment of standards for opium, cinchona and nux vomica, a principle which has since been adopted by the Government in its customs service. The sense of the Association was that the revisers should extend this principle by fixing standard values on drugs other than the three already established. It was suggested that this could be done with immediate advantage and without involving any novelty, whether of method or of principle, by establishing the official standard for belladonna, hyoscyamus, conium, veratrum, gelsemium, colchicum, stramonium, calabar bean, podophyllum, ipecac and others of like nature. These are all amenable to chemical assay for the quantitative determination of their active principles.

To appreciate the necessity of such a system of standard calls for the briefest glance at the practical condition of prescription. In this branch of his duties the physician must recognize that at present there are numbers of preparations of any given drug, and there is no uniformity in the amount of the active principle in the several preparations. If, therefore the physician prescribes a certain drug which will produce a certain physiological result when a certain amount of the active principle is used, and which might be harmful in the event of administering more of the active principle, he is reduced in the present absence of standard to prescribe the minimum dose of the most potent preparation

known to him in order to avoid the dangers of the overdose; yet it will be manifest that this exposes him to the risk of exhibiting less than will have a beneficial result if the dispenser should employ one of the weaker preparations. With a standard officially established this inconvenience will vanish.

Nor is that all that has been recommended to the committee on revision of the pharmacopœia. This extends to other drugs susceptible of chemical assay the principle recognized in the case of the three drugs already standardized. But there is a considerable line of remedial agents in which chemical assay is impracticable, the agents in which the active principles appear in the form of glucosides. It is recommended that the principle of establishing the standard be extended to them although the method will involve some alteration. These agents are quite as valuable as those which may be made to exhibit their standard under chemical manipulation, and in many cases their toxicity is even greater, which shows the importance of creating such a standard. Where chemistry fails with them physiology steps in and makes possible their standardization. This is no new thing. The manufacturers who have enlisted most sedulously the assistance of science, who have with them the largest corps of men skilled in medicine, in pharmacology and in chemistry have developed this physiological test to an operative success. In some cases of serums and antitoxins the physiological test has been accepted without cavil. It is practiced in other cases as well. At Columbus, when the discussion was at its briskest, Dr. George F. Butler of Chicago said: "I believe there are no better drugs than the standardized drugs, and I have no hesitation in saying that Parke, Davis & Co. are deserving of credit for their effort to standardize drugs by physiological test or assay on animals." In itself this is but a statement of what experience has found commendable. That it has sufficient importance to claim a recognition in the new pharmacopœia will be recognized on the most casual investigation of the drugs to which such physiologi-

cal test is the only method practicable. A single instance should suffice. Strophanthin, the active principle of strophanthus, is three times as poisonous as atropin, ten times as poisonous as strychnin, and twelve times as poisonous as absolute hydrocyanic acid. That must establish the need for fixing a standard of strophanthus, which is but one of a considerable list, and that standard can be established only by physiological test.

THE TREATMENT OF WHOOPING COUGH.—Investigation of a subject often leads to the bringing out of truths we never before considered in connection with a subject. Whooping cough is a disease which is very common, and although the medical annuals each year contain a number of drugs which have been brought out as specifics, yet we find that nearly all the writers on the diseases of children still regard whooping cough as a self-limited affection. Several years ago I took occasion to make a study of the literature of whooping cough with a view of ascertaining the status of opinion among the ablest observers regarding the self-limited character of the disease and of the preference regarding the remedial agents employed.

I shall let it suffice to say that the drugs which have been employed embrace all of the anodynes, antispasmodics and agents of that character, as well as nearly every other kind of drug which can be conceived of.

Belladonna I have found to be in the greatest degree of favor among observers, most of whom express their reliance in the curative action of this drug. The bromides are generally esteemed valuable agents.

Almost all authors regard whooping cough as a self-limited affection whose course occupies four to eight weeks; while some are silent on this point, others are sure that we possess no means of bringing about a cessation of the disease by medicine.

From my experience and study of the disease during the past five years from the standpoint of a sanitarian as well as a medical practitioner, I am confident that whooping cough is not a self-limited affection, and tha

we can bring about a curative termination by therapeutic measures.

The principles of treatment in my hands have been very simple, and I depend upon agents which have long been the mainstay of the affection. Belladonna is a remedy which I give from the incipency of the attack, in conjunction with simple expectorants such as syrup of ipecac and the syrup of toltan. This following prescription is one which I usually give:

R Tinct. bellad., gtt. xxxij.

Syr. ipecacuanha, gtt. xl.

Syr. toltan, q. s. ad $\frac{3}{4}$ ij.

Sig. Teaspoonful every two hours, to a child one year old.

Along with this I give as an antispasmodic the bromide of sodium in doses of five grains every four hours, generally in solution and with unvarying regularity. This tends to cause a longer time to relapse between the paroxysms of cough, and thus we score a decided point in favor of the patient.

I have found very material assistance in allowing the Schering's formalin lamp to burn in the sleeping room of these patients. By keeping the flame of the lamp low only one pastille is consumed in three or four hours. This causes little if any irritation and after a short time the child goes to sleep. The inhalation of the disinfectant exerts a decided curative action upon the affection.

These patients should be adequately fed; in fact I am very sure that we very often overlook the importance of this matter. They invariably vomit when an attack of coughing comes on, and very often as a result they become emaciated to an advanced degree. When nourishment by ordinary means is inadequate, recourse must be had to peptonized milk and to predigested foods.

By reason of the presence of a catarrh of the bronchial tubes as a necessary part of the disease in question, they very naturally and easily take on pneumonia and other complications. Emphysema as a resultant affection is often seen after an attack of whooping cough which has not been successfully or properly treated. I am, in view of its complications and its possible terminations, always particular to see that parents are cautioned against allowing chil-

dren to expose themselves to the inclemencies of the weather.

Treated on this basis—on the lines laid down—I have notes on one hundred cases of whooping cough. Of these cases seventy-five recovered in ten days from the time they came under treatment; ten cases were extremely delicate children and they were ill for fifteen days; in ten cases complications set in before the treatment was begun; and five were not seen after the treatment was fairly begun, but they presumably recovered without incident.

The treatment here advocated brings about a termination of the disease in a period much shorter than any method which I had employed.

By Milton P. Creel, M. D.,

Central City, Ky.

Surgeon Q. C. Railway, Surgeon L. & N. Railway, Secretary Muhlenberg County Board of Health, Referee for Muhlenberg County for Kentucky State Board of Health, President Muhlenberg County Medical Society, Member U. S. Board Pension Examiners, Member American Medical Association, Member Kentucky State Medical Society, etc., etc.

WHAT SHALL THE STANDARD BE?

There are two things which go to make the practice of medicine an uncertain art; the personal equation of the patient, and the unreliability of the remedies administered to him. The organic differences of individual constitution which go to form personal idiosyncrasy are largely outside the control of human agencies. There would, however, seem no good reason why some method of acquiring exactness and uniformity in pharmaceutical preparations cannot be achieved. The race has struggled with more difficult problems than this, and in this one there is nothing which should defy solution by human effort. The uniformity of standard which prevails in other branches of science is largely absent in the science of materia medica. The practitioner who writes a prescription for digitalis in a dozen different parts of the city will find in some instances that he obtains a drug which exhibits a satisfactory physiological action, and in others that no satisfaction is given. The administration of cannabis indica may be attended by no action at all, or it may produce hashish hallucinations. The use of a good many remedies

has been practically discontinued on account of this unreliability.

The forthcoming revision of the pharmacopœia would seem an opportune moment for insisting upon some definite standard being required. Scientific knowledge differs from ordinary knowledge in being quantitative rather than qualitative. Where, however, quantitative knowledge is impossible of attainment, qualitative knowledge is an extremely desirable possession. The ideal standard would probably be the chemical one, and those drugs capable of chemical assay should be required to exhibit their component substances in proportions of definite quantity and strength. The pharmacopœia has already recognized the matter of chemical standardization and requires that cinchona, opium and nux vomica shall comply with certain definite requirements. It is to be hoped that a number of other toxic and powerful drugs susceptible of chemical assay will be added to this list. There are, however, a large number of galenical preparations which are not as yet, and probably never will be, amenable to chemical assay. They may contain chemical compounds which are not susceptible of isolation. For these it might reasonably be thought some simple method might be inaugurated whereby it could be determined whether the drugs were capable of doing what was expected of them. Where drugs could not be standardized chemically they might be standardized physiologically. By complying with a few simple rules it might be easily ascertained whether the physiological principles of the drug were vitally active. It matters little how much crude ergot goes to the fluid pound of the extract if the product fails to produce a characteristic physiological action. The effect of the drug can easily be tested upon the lower animals. The physiological laboratory is nowadays furnished with instruments which facilitate all methods of precise observation.

The physiological unit has now come to be universally accepted in medicine in connection with the strength-standard of antitoxin. As a principle of applied pharmacology it has undoubtedly found a permanent place in the progressive technol-

ogy of that science. Would it not therefore be wise for the purpose of securing that uniformity which is the basis of exact medication that drugs not amenable to chemical assay shall have their therapeutical value determined by conforming to a physiological standard? The remedies so standardized would at least have the merit of passing through the severest test human experience can devise, that of exhibiting the features of fulfilled prediction.

While the adoption of the principle of universal standardization by the pharmacopœia is unquestionably a measure the consummation of which is much to be desired, there is a strong probability that, for obvious reasons, the revision committee may not see fit to recognize the principle in the next edition. Future generations alone may happily profit by the agitation in behalf of this change, now being conducted by leading scientific men, assuming, of course, that the profession is content to drift along in a state of irresolution and inaction.

Is there no help for those of us who must live and practice our art in the present day? Why should we be fettered by the traditional conservatism of the pharmacopœia, rational though it may seem? The remedy is near at hand. We do not think that in this age of invention and progress it would be asking too much, or going one step too far, if the medical profession should insist that the pharmaceutical manufacturer assay, or better, perhaps, "standardize," every powerful preparation which passes from his hands. American pharmaceutical establishments ought to be well equipped for scientific work, both as to plant and facilities. They are sustained by ample capital and presided over by men of marked executive ability. Why should these great agencies await the initiative of the revision committee? Let pharmaceutical manufacturers give us drugs that have been standardized, chemically or physiologically, as the circumstances may require. We believe they will do so cheerfully and with alacrity if medical practitioners, with one accord, will demand that standardized preparations be supplied upon their prescriptions. As hope-inspiring evidence

that manufacturers are willing to co-operate with the profession in this particular direction we may cite the noteworthy fact that a few physiologically standardized preparations have made their appearance, and there is every reason to suppose that others will follow if the demand for them be unanimously and insistently voiced throughout the domain of scientific medicine.—*Medical Age*.

UREMIA TREATED BY ARTIFICIAL SERUM.—A *confrère* publishes a case of uremia successfully treated by injections of artificial serum. The patient entered the hospital for dysentery and was going on well when he was suddenly seized with vomiting, serous diarrhea, accompanied by cramps in the limbs, while the pulse became almost imperceptible. Immediately ten ounces of artificial serum was injected, with the result that the pulse got stronger, and the diarrhea and all the other symptoms ceased at once. The following day a large quantity of albumin was found in the urine, as well as cylinders and renal epithelium. The amount of urine excreted in the twenty-four hours did not exceed three ounces. The case was evidently one of acute nephritis with uremic poisoning. The improvement obtained from the first injection was not maintained, however, and a second had to be given, followed by two others, when the patient could be considered cured. The author believes that the above case furnishes an indication for treatment under similar conditions.—*Paris Cor. Med. Press and Circular*.

FUNCTIONAL NEUROSES.—To overcome the anæmia so often associated in this class of cases, I have found the solution of bromide of gold and arsenic to be among the most serviceable drugs at our disposal; beginning with five-drop doses in a glass of water after meals and increasing one drop daily until from fifteen to twenty drops are taken. The red blood corpuscles and the percentage of hæmoglobin are rapidly increased with the use of this drug. Occasionally, however, we do find a patient with whom

it disagrees, when we must resort to other remedies. The gold solution has also a decided effect on the inflammatory conditions of ovaries. This was pointed out by an author in a European journal ten or twelve years ago and has been employed during that period by me. Since the introduction of Dr. Barclay's solution, which is a combination with arsenic, it has been used with better effect than the chloride of gold and sodium in pill form. Barclay gave the name *arsenauro* to his solution for sake of brevity.

H. J. Boldt, M. D.,

New York.

Professor of Gynecology in the Post-Graduate Medical School; Gynecologist to the Post-Graduate Hospital, to St. Mark's Hospital, and to the German Poliklinik; and Consulting Gynecologist to Beth Israel Hospital.
Read before New York Academy of Medicine, Nov. 26, 1898.

MEDICAL INSTRUCTION.—Any one who is familiar with the existing methods of medical instruction is aware that in nearly every department many things are taught which are subsequently found to be of use to only a fraction of those receiving the instruction. Thus the surgical anatomy of hernia is taught to men who will subsequently devote themselves to dermatology; future obstetricians are required to master the details of physiological optics, and the microscopical anatomy of tumors forms a part of the instruction of men destined to career as alienists. Now, no one can question the propriety of including instruction on all these subjects in the curriculum of a medical school, but it may be questioned whether every student should be forced to take instruction in them all. It may, perhaps, be urged that no choice of studies can be made without determining, to some extent, the direction in which the work of the future practitioner is to be specialized, and that such specialization cannot be properly and safely permitted until the student has completed his medical studies. To this it may be answered that, whatever may be the dangers of too early specialization, the dangers of crowding the medical course with instruction of which many students do not feel the need, and of thus encouraging perfunctory and superficial work,

are certainly no less serious. Moreover, it will, doubtless, be found perfectly possible to establish such a relation between the required and the elective courses that the requirements in each department will be in no way lowered, while a certain freedom of choice is permitted with regard to the direction in which the work is pursued.—*Science*.

INGUINAL HERNIA IN CHILDHOOD.—In discussing the causation and treatment of this condition in children, R. H. Russel (*Intercol. Med. Jour. of Austral.*) advances some radically new theories and states that he has been entirely successful with no mortality in twenty-nine cases in which he operated and has had no recurrences. Basing his theory on the anatomical construction of the inguinal canal, he believes hernia is prevented by the sphincteric action of the muscles that cover the canal which is aroused when any effort is made that would expel the intestines into the canal. He also holds that the viscera only succeed in entering it when a funicular pouch of peritoneum persists and renders the way easy and prevention difficult. The sole object in treatment is the removal of this sac; when this is once accomplished the hernia will not return—at least he has seen no recurrence. He believes that these-called cures by trusses are not absolute, though the hernia may never again come down. He advises the radical operation by the simple removal of the sac in all cases of children, believing they are far safer after it, that it is shorter in curing, and that the cure is more permanent and sure than that procured by a truss.—*Ex*.

LABORATORY NOTES.—By Richard Muir (Edinburgh). (*Jour. Path. and Bact.*) A Simple Method of Restoring the "Spiking" of the Bacillus Anthracis in Gelatine Stab Cultures. After noting the loss of this phenomenon, in conclusion the author states that it may be restored "by simply making a culture of the old non-spiking organism on a freshly prepared blood-agar tube and incubating it for twenty-four hours at

37° C. If subcultivations be made from the blood-agar culture by stabs in 10 per cent. gelatine peptone medium, and incubated for two days at 20° C., it will be found that the organism has recovered its powers of spiking as completely as if it had been taken directly from anthrax blood."

A Modification of Pitfield's Method for Staining Flagella.—Cover-glasses cleaned by Van Ermengem's method are spread in the usual manner and allowed to dry in the air:

(a) *The Mordant.*

- B Tannic acid, 10 per cent. watery solution (filter), c. c. x.
- Corrosive sublimate, saturated watery solution, c. c. v.
- Alum, saturated watery solution, c. c. v.
- Ziehl-Neelsen's carbol-fuch-sine stain, c. c. v.

Mix thoroughly and put in test tubes, which are then centrifugalized; or, if a centrifuge is not available, the mixture may simply be allowed to stand over night. A thick deposit will be found at the bottom of the tubes or vessel, and the clear colored fluid above it should be removed with a pipette and transferred to a clean bottle. The mordant will keep good for one or two weeks.

(b) *The Stain.*

- B Alum, saturated watery solution (filter), c. c. x.
- Gentian-violet, saturated alcoholic solution, c. c. ij.

The stain will keep for two or three days. This stain can be used in the mordant in place of the carbol-fuch-sine stain. To stain, "pour on as much of the mordant (a) as the coverglass will hold, heat gently over a flame till the steam begins to rise, allow to steam for about one minute, and wash well in a gentle stream of running water for about two minutes. Then dry carefully over a flame, and when perfectly dry pour on some of the stain (b). Proceed as before, steaming gently over a flame for about one minute, washing well in running water for one or two minutes. If black-stained, preparations are preferred, treat with Gram's iodine fixing solution for one minute, drying over a flame, and finally mounting in Canada Balsam."—*Rev. of Med. and Surg. Prog.*

TREATMENT OF ENDOMETRITIS BY DRAINAGE AND IRRIGATION.—Dr. Augustin H. Goelet, of New York, in a paper presented to the Gynecological Section of the American Medical Association declared it was an error to regard every uterine discharge as evidence of endometritis and to employ such applications as caustics and astringents which coagulate the secretions and defeat drainage by blocking the orifices of the glands. This and destructive curettage he designates unscientific. Hyperæmia with hypersecretion from the mucous membrane often mistaken for endometritis requires no local application, in fact is often connected with an endometritis by such treatment.

He pointed out the danger of inserting instruments into the uterus, either for the purpose of diagnosis, treatment, or for operations when there is a so-called cervical catarrh. The staphylococci, streptococci and gonococci are often found in the cervical secretion when it is most inoffensive in appearance and their presence or absence can only be determined by microscopical examination of the discharge. He insists, therefore, that this method of examination should always be employed in this case, particularly before the cavity above the internal os is invaded either for the purpose of diagnosis, treatment, or operations within the uterus.

In endometritis the disease is not confined to the surface but has involved the glandular structure beneath, hence, he believes the rational treatment is to free the orifices of the glands and drain them until the infective process is exhausted, at the same time employing repeated irrigation with some non-astringent, non-irritating solution to remove the expelled secretion from the surface and prevent migration of infective germs. This may be accomplished by a carefully executed curettage as an initial step, done in a manner not to destroy the mucosa but merely for the purpose of removing projecting granulations upon the surface or superfluous tissue that may be blocking the orifices of the glands and preventing drainage. The dull curette with rigid shaft he thinks is sufficient and the sharp curette

should not be used upon the endometrium of the cavity in endometritis. It is both unnecessary and unwise to attempt to remove the entire mucous membrane and caustics should not be used afterwards in these cases. They cause necrosis, and atrophy of the mucous membrane or agglutination of the sides of the cavity may result.

He urges that curettage should be regarded only a preliminary step in the treatment, and that more attention should be given to the after-treatment, which he deems most important. This to consist of persistent drainage and irrigation until all evidence of disease, as revealed by microscopical examination of the secretion and inspection of the cavity by means of the uterine endoscope, has been effaced.

He also urges endoscopic examination of the cavity both before and after curettage, before, to decide the actual necessity therefor and after, to determine the completeness or incompleteness of the work. In this way only may errors be avoided.

He exhibited a perfected uterine endoscope with a small electric lamp placed at the extremity of the endoscope tube for direct illumination of the interior of the uterus after the plan of the Valentine urethroscope. A megaloscope is attached for bringing out more prominently the details of the surface.

By means of this instrument inspection of the uterine cavity, including the orifices of the tubes, is made possible.

WHAT IS THE SECRET OF THE BENEFICIAL ACTION OF PURGATIVES IN PERITONITIS?—(1) They withdraw fluid from the congested portal veins, and so promote absorption of intra-peritoneal effusions. (2) They probably modify the functions of the liver in such a way that it is enabled better to cope with and destroy the poison absorbed from the peritoneum. One function of the liver seems to be to prevent the passage into the general circulation of toxins absorbed either from the intestine or peritoneum; the liver cells either destroy these toxins or excrete them in the bile. (3) Purgatives mechanically remove these excreted toxins from the intes-

tinal canal. (4) Calomel probably acts in some degree as an intestinal disinfectant, inhibits the formation of flatus, and possibly exerts a restraining influence on the development of micro-organisms in the peritoneum. (5) Purgatives by stimulating peristaltic movements combat the tendency to paralysis of the bowel, diminish the tendency to intestinal adhesions, and mechanically remove flatus.—*Martin, The Scalpel.*

BORAX AND BORIC ACID AS PRESERVATIVES OF FOODS.—The *National Druggist* has undertaken a searching inquiry into the experience of various authorities in the matter of the alleged harmfulness of these agents, and into the published opinions of writers. The results of its investigation are given in its April issue. Our contemporary has been able to find only one printed article purporting to be in any way authoritative in which the preservatives in question are said, and that by false analogy, to be perhaps injurious to the animal organism. The false analogy in the article, by Peligot, originally published in a secular journal and probably written under the bias of an inclination to help on the trade in refrigerated meats at the expense of the preserved-meat industry, lies in his having inferred from the deleterious action of borax and boric acid on vegetation that they were injurious to animal life, the direct opposite, as our contemporary points out, of the inference he might legitimately have drawn.

This article of Peligot's, perverted by garbled extracts and by ignoring the fact that the experiments had been performed only on plants, served another writer, Le Bon, whose article also was originally published in a French secular journal, and thence translated for the *Chemical News* for January 3, 1879, as the foundation for such sweeping assertions as that all saline preservatives, including common salt, should be avoided, and that refrigeration is the only safe method of preserving meats, etc., to be used as food. One has simply to bear in mind, says the *National Druggist*, that twenty years ago, when Le Bon's article came out, there was a contest going on be-

tween persons engaged in handling refrigerated meats from South America and Australia and these engaged in the older processes of preservation.

Our contemporary states that it has been able to find but one report in medical literature of evil consequences ascribed to borax or boric acid, that of Dr. Gowers, in the *Lancet* for September 24, 1881, who states that in three cases in which large doses of borax had been given for prolonged periods in the treatment of epilepsy its use had been followed by psoriasis. Granted, says the *Druggist*, that the psoriasis was caused by the borax, does not the exclusive use of meats put up with common salt give rise to a much worse disease, scurvy? And, yet, it adds, the use of salt as a food preservative is not forbidden.

On the other hand, the *Druggist* cites many and eminent authorities in testimony to the innocuousness of borax and boric acid as preservatives. In short, our contemporary seems to us to have "blown away," as it phrases it, the last possible objection to the use of these agents for preserving articles of food.—*New York Medical Journal.*

STERILITY: ITS SURGICAL TREATMENT.—At the Boston meeting of the American Gynecological Society the subject "The Surgical Treatment of Sterility; How Far is it Justifiable or Expedient?" was discussed by Matthew D. Mann, Professor of Gynecology in the University of Buffalo. He considered the surgical treatment of sterility due to (1) malformation of the vulva and vagina; (2) atresia of the vagina dependent on disease; (3) laceration of the cervix; (4) stenosis of the os; (5) displacements of the uterus, and (6) endometritis. Suitable operation was advised in the first class of cases, provided the existence of the uterus and appendages could be made out with reasonable certainty. In atresia of the vagina efforts should be made to open the canal if the patient be young. This condition, however, is one which usually afflicts elderly women in whom surgical interference is not indicated. Trachelorrhaphy was ad-

vised in cases in which sterility might be due to laceration of the cervix, and stenosis of the os should be treated by divulsion. Retrodisplacements of the uterus are rather conducive to conception than otherwise, therefore it is ante flexion which the surgeon is called upon to treat and all possible means should be employed to correct the position of the organ. Endometritis is considered by the author to be by far the most common cause of sterility. For this condition he recommends forcible dilatation, curetting and packing. Before closing he called attention to the fact that in some cases, the husband, and not the wife, is to blame for the sterility.—*Amer. Jour. of Gyn. and Surg.*

EXPERIMENTAL TYPHOID INFECTION. Experimental typhoid infection, produced by the introduction of virulent cultures into a thiry loop. Typhoid bacilli were placed in the thiry fistula of a dog with the result that the ulcers produced in the loop perforated, producing general peritonitis. The agglutinating action of the serum of this dog was very marked. A second dog treated in a similar way did not die, although the serum had marked agglutinating properties and ulcers were present in the loop. The authors believe the reason this dog did not become very sick was because in this case they had used a piece of the jejunum as a loop, while in the first a piece of the ileum. The fact that the rest of the intestine was free from ulcers speaks against the view that they are due to the elimination of toxins.—*Lepine and Lyonnet, Cent. f. med. Wissens.*

DIABETES MELLITUS AND PREGNANCY.—Dr. F. W. Taylor (*Boston Med. and Surg. Jour.*) draws the following conclusions: (1) Diabetes may come on during pregnancy. (2) Diabetes may occur only during pregnancy, being absent at other times. (3) Diabetes may cease with the termination of pregnancy, recurring some time afterward. (4) Diabetes may come on soon after parturition. (5) Diabetes may not return in a pregnancy occurring after its cure. (6) Preg-

nancy may occur during diabetes. (7) Pregnancy and parturition may be apparently unaffected in their healthy progress by the diabetes. (8) Pregnancy is very liable to be interrupted in its course, and probably always by the death of the foetus.—*Med. Rec.*

VENESECTION AND INTRAVENOUS INFUSION IN ECLAMPSIA.—In a report of two cases successfully treated by the above method Dr. Charles N. Cutler says (*Boston Med. and Surg. Jour.*) that a careful search of current literature fails to disclose any detailed reports of cases thus managed. "Assuming that eclampsia is caused by irritation of the nerve centers from retained elements in the blood, it becomes evident that any effort of nature or art which will lessen this irritation will in some degree bring about the desired results. The rapid abstraction of a quantity of this surcharged blood partly accomplishes this end, the introduction of a large quantity of decinormal salt solution dilutes the remaining portion and at the same time, by overloading the vessels, becomes an active and prompt diuretic."—*Ex.*

ELIMINATION OF TANNIC AND GALLIC ACIDS.—The substances eliminated by the urine after the administration of tannin and gallic acid. After the administration of medicinal doses of tannin or gallic acid very little gallic acid is found in the urine, as the greater part of the acid which is administered, or may be formed in the body, is eliminated by the intestine, yet after the administration of large quantities of gallic acid a great deal may be found in the urine, the amount, however, varying for different individuals. The administration of alkalies seems to favor the passage of gallic acid into the urine. After the use of tannin no unchanged tannin is found in the urine, but is found if the tannin was given in alkaline solution. No pyrogallol is formed in the body from tannin, although it is readily formed in the test tube under the influence of potassium permanganate. Pyrogallol may, however, form from gal-

lic acid in the urine by standing. The separation of small quantities of pyrogallol from gallic acid can only be effected by the solubility of pyrogallol in boiling benzine, as the reactions are uncertain.—*Harnack, Cent. f. med. Wissens, Zeits f. phys. Chem.*

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Notes and Comments.

TUBERCULOSIS OF THE TESTICLE.—The prostate plays a very important rôle in the etiology of tuberculosis of the testicle. It serves as a breeding ground for the tubercle bacilli, where for a considerable length of time they can multiply, though remaining almost inactive and causing only slight disturbances. But under proper conditions these bacilli may, with or without participation of the urinary organs, proceed along the vas deferens and infect the testicle.—*Koenig, Med. Rec.*

CASTRATION FOR PROSTATIC HYPERTROPHY.—The objection I urge is this: If the operation is commended generally by surgeons of good standing, soon we will hear of men being castrated for stone in the bladder, for chronic cystitis, and for malignant disease, because it is not always possible or easy to make a positive differential diagnosis between simple hypertrophy of the prostate and some of the conditions which simulate it so closely.—*MacKinnon, Canadian Practitioner.*

THE MEDICAL CORPS OF THE ARMY AND LEGISLATION.—The compromise bill for the continuance of the regular army at its war strength of 62,000 for a period of two years has made no provision for any increase in medical officers, although the surgeon-general, in his last annual report, called attention to its necessity for the proper performance of the work of his department, placing his working minimum at an increase of two colonels, six lieutenant-colonels, thirty majors and fifty assistant surgeons, and has also personally called the attention of the military committees to the needs. While Congress, in the face of recent experience, has

again refused to provide a sufficient personnel, the medical department will probably in the future, as in the past, be held responsible for its own shortcomings, as well as those of the quartermaster's department. — *Boston Med. and Surg. Jour.*

TOLERANCE OF TWO BULLETS IN THE BRAIN.—M. Maurice Pollosson (*Lyon médical*) recently presented to the Surgical Society of Lyons a patient who fired two bullets into his brain two months previously. Skiagraphy showed one of them to be situated within the frontal lobe of the brain, while the other rested on the orbital vault. There were no cerebral symptoms, but some ocular troubles—retraction of the visual field and dilatation of the pupil. Ophthalmoscopic examination showed anæmia of the papilla and dilatation of the veins. The condition of the vision tended toward improvement.—*N. Y. Med. Jour.*

CARBOLIC ACID POISONING.—Dr. Comby calls attention (*Soc. méd. de Hôp. de Paris*) to the susceptibility of children to poisoning from the local application of weak carbolic acid solutions. He records the case of a child, five years old, affected with otitis media, that developed a severe hæmaturia after ten days' use of a one and one-half per cent. solution of carbolic acid. The ear was syringed five or six times daily, and after the last washing five drops of carbolized glycerin was instilled.—*Med. Rec.*

THE GULLIBILITY OF THE PUBLIC.—According to the *Boston Medical and Surgical Journal*, the *Practitioner* in an interesting account of Sir William Jenner, in which his professional honesty and even bluntness is commented upon, gives the following excellent anecdote of another distinguished physician who had certain qualities which Jenner lacked. The story is taken from the *St. Bartholomew's Hospital Journal*: "Dining one evening in the company of some medical men, among whom was Dr. Martin, then physician to 'Bart's,' Sir William Gull declared that some amount of quackery was essential to success in medicine. 'It is an example of

the old saying,' he averred, '*Populus vult decipi*.' The host asked for a terse English equivalent. 'Oh, that's easy enough,' said Dr. Martin quickly, 'The public like to be gulled.'"—*N. Y. Med. Jour.*

THE OHIO TREATMENT OF "CHRISTIAN SCIENCE."—In the *Sun* there appeared the following letter, written by Dr. Charles A. L. Reed, of Cincinnati:

"In the alleged defence of Christian Science by Mary Baker G. Eddy, recently published in the *Sun*, she declares that 'a person's ignorance of Christian Science is sufficient reason for his silence on the subject.' Even if that is so I am not barred out by the terms of her proscription. On the contrary, I wish to qualify under the rule. I have been a careful student of Christian Science for a long time, and I have even written a book on it. I have done more: I have studied Christian Scientists in general, and Mrs. Eddy in particular. Indeed, I know a lot of things about her and her followers that neither she nor they suspect that I know. The task has been imposed upon me as an officer of the law, of which some of Mrs. Eddy's followers in Ohio have been flagrant violators. If their misguided zeal shall prompt them to continue under her leadership, I promise to secure for some of them a commitment—but whether to the penitentiary or to an asylum for the insane is at this time an open question.

Mrs. Eddy comes into the arena with her characteristic bravado and challenges the world to prove a negative. She blissfully closes her eyes to the fact that she herself has not proved the positive. On the contrary, her self-heralded wonders rest entirely upon her own unsupported declaration, and that to me and to a great many other people is worth absolutely nothing. She should remember that even people who are not the victims of vagaries such as hers, and whose everyday utterances do not toy so confusingly with the eternal verities as do hers—even such people are expected to bear the burden of proof when they seek to tax credulity. I therefore demand the proof of this high priestess, and that the issue

may be clearly drawn I shall take up a few of her declarations, seriatim:

Mrs. Eddy says: 'I healed consumption in its last stages * * the lungs being mostly consumed.'

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

Mrs. Eddy says: 'I healed carious bones that could be dented with the finger.'

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

Mrs. Eddy says: 'I have healed at one visit a cancer that had so eaten the flesh of the neck as to expose the jugular vein so that it stood out like a cord.'

I denounce this declaration as false, and challenge its substantiation by competent and disinterested testimony.

When Mrs. Eddy speaks of 'malignant tubercular diphtheria' as among her cures, she, by her own phraseology, proclaims her utter ignorance of one of the most dangerous of diseases, now nearly bereft of its horrors through the beneficence of modern medical science—a disease chiefly of defenseless childhood that she and her fanatical followers would sacrifice upon the altar of their tragic egoism.

But if Mrs. Eddy has done all of these wonders she can do them again. If she is devoted to humanity in the altruistic fashion that she proclaims, she will not hesitate to demonstrate her alleged 'science' under circumstances that will give it the widest possible influence. To this end, if she will come to Cincinnati, I will place at her disposal, cases of 'consumption,' cases of 'cancer,' and cases of 'carious bones.' She shall have them under observation for such time as she shall determine and she shall dictate all details of their management. They shall, however, be under the daily observation of a competent and disinterested person of my choice, but who shall have no voice in their management and who shall visit them only in her presence. If she, by her Christian Science, shall cure any one of them I shall proclaim her omnipotence from the

housetops, and if she shall cure all or even half of them I shall cheerfully crawl on my hands and knees that I may but touch the hem of her—walking dress. If it will be more to the convenience of Mrs. Eddy and she is not disposed to honor us with a visit I shall take pleasure in endeavoring, through my friends, to make a similar arrangement for her at Bellevue or some other New York hospital. If Mrs. Eddy will accept this challenge and cure one or more of the cases she will thereby demonstrate that she may be something more than either a conscienceless speculator on human credulity or an unfortunate victim of egoistic alienation."—*New York Medical Journal*.

POTT'S DISEASE.—In a paper upon the immediate correction of deformities resulting from Pott's disease, Dr. Goldthwait (*Boston Medical and Surgical Journal*) describes a simplified operation carried out in a large number of cases, and an apparatus by which it is possible to accomplish correction without the necessity of many assistants, and which makes it possible to apply the jacket with marked hyperextension of the spine. Almost immediate recovery took place in five cases with paralysis.—*Med. Rec.*

DYSMENORRHOEA.—Dysmenorrhoea is a painful and distressing condition. It may precede or persist through the menstrual period. Usually it precedes the appearance of the discharge. The pain is often so acute as to cause the sufferer to roll about the floor in agony. The treatment usually adopted in all countries is to give alcohol with hot water under these circumstances. The relief so afforded is often very great, so much so that the late Sir James Simpson asserted that this constituted the worst feature in the treatment. The relief afforded by alcohol in this condition, he asserted, was one of the most common causes of ultimate excessive indulgence in alcohol by women. Having learned to resort to it, he declared they were led to resort to it at other times and he advocated strenuously the use of any other stimulant than that which is at hand in almost any sideboard. Sal vola-

tile, spirits of chloroform—anything, indeed, but alcohol, he advised, as being equally efficacious and being free from the dangerous allurements of the other.—*Fothergill, Med. Rec.*

HEADACHE.—Bromide of ammonium is a most excellent remedy for occasional headaches where there is nervousness.—*The Southern Clinic*.

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Therapeutic Notes.

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Original Communications.

PRIMARY CARCINOMA OF THE LUNG.

BY KURT WITTAUER, M. D.,
HALLE.

(Translated from the German by J. J. Berry, M. D.)

WHILE cancer is prone to involve other localities, it seldom occurs in a primary form in lung tissue. Secondary deposits, however, are often observed in the post mortems of cases suffering from the disease in other organs, and even in the living subject one is often able to diagnosticate a lung metastasis, especially in cancer of the breast, where one would naturally expect to find the condition in question.

It stands to reason, therefore, that its demonstration in most cases is very difficult, both by reason of its rarity and the absence of any characteristic symptoms.

MacLacklen reports the case of a man 62 years old, who up to within three days of his death, possessed a uniformly good appetite, but complained of an irrepressible cough and severe dyspnoea. The disease involved the entire right lung and was adherent to the pleura.

Upon section, there exuded from small cavities varying in size from that of a pea to a walnut, either a thick yellow pus of foetid character, or a white yeast-like material resembling brain substance. The walls of those cavities were rough, friable and without a lining membrane. At the root of the lung was found a large white nodular growth, connected with the pericardium and surrounding and compressing the superior vena cava, right bronchus and pulmonary artery. The inner

surfaces were of a glistening, white color like a scirrhus of fibrous texture and exuded on pressure a fluid of creamy consistency. The other lung was healthy and the disease was undoubtedly of a primary nature.

Warburton Maybie describes a similar case which terminated fatally in fifteen weeks after the appearance of the first symptoms. The right side of the face and neck were somewhat swollen and the blood vessels in that locality quite distended. Speech was affected and there was present a loud cough. The respiratory movements were impaired on the right side with dullness on percussion up as high as the second rib.

The general condition was variable. Hydrothorax finally developed on the right side with orthopnoea; afterwards moderate oedema of the entire left side with complete dullness of the left. Aspiration was performed several times with much temporary relief.

The autopsy showed a medullary sarcoma involving the upper lobes, which partially occluded the bronchus and larger thoracic veins of the right side. There were also some old adhesions and tubercles. A microscopical examination established the malignant nature of the disease.

In a case reported by Beale only a small portion of the posterior lower portions of the lungs were healthy—the remainder being composed of a cancerous mass weighing six pounds, which was connected with the chest wall by a few fibrous bands, and also with another, but smaller swelling in the neck. There were no other deposits anywhere to be found, excepting a small gland back of the pancreas.

Bierbaum describes a very similar case in which the whole left lung

was involved and firmly adherent to the pleura.

Finally may be mentioned an instance of primary malignant disease of the pleura reported by von Chvastek which presented similar symptoms. It simulated a pleural exudate, and by aspiration one and one-half litres of a reddish-brown flocculent fluid was removed. At the autopsy the pleura was found to be greatly thickened, nodular and infiltrated with whitish, fungoid masses which exuded a milky fluid.

Regarding the etiology, little is to be said, as at the present time the origin of carcinoma is veiled in obscurity.

Wolf found the primary form strikingly often in Dresden, having seen no less than thirteen cases occurring in connection with tuberculosis. He believes that in their development one is favored by the presence of the other.

Lenhartz observed this disease but eleven times in six years in Hamburg, though this does not indicate any undue prevalence in that city, for Chief Physician Gläser could recall during his fifty years' service only one case of this kind.

It is worthy of remark that according to Hesse and Hærtling, primary lung cancer is of frequent occurrence among the miners of Scheeberg—75 per cent. of the yearly deaths being due to that disease. Inheritance may have an influence, but the author believes that alcoholism and the mode of living, as well as the extremes of temperature and fumes of the pits have a marked causative effect. Bonitz, however, gives more weight to the influence of the mixture of cobalt and nickel with arsenic and sulphur occurring in the locality.

According to Bégin, 0.8 per cent. of all fatal cases suffer from lung cancer, and of these 6.8 per cent. are of a primary character. For every five cases in men there are three in women. The theory that it occurs preferably in the young has not been substantiated.

From a pathological standpoint the origin of the disease is important. Wagner notes four cases in which it originated in the lymphatic vessels. Siegert considers the origin of pri-

mary epithelial carcinoma of the lungs:

1. In the alveolar epithelium.
2. In that of the bronchial mucous membrane.
3. In that of the bronchial mucous glands.

Siegel, and later Hildebrand, describe this condition as occurring in connection with tuberculosis which resulted from prevented growth in bronchial wall in the substance for cicatrix resulting from ulcer.

Clinically, two forms of cancer are noted:

1. Disseminated miliary deposits, similar to the tubercular.

2. Localized masses of large size, and tumors with ulceration and gangrene, similar in character to large tubercles.

Scirrhus of the bronchi with contraction of these, and also the interlobular septa and pleural investment, was noted twice as secondary to cancer of the stomach and bronchial glands. Again was there a carcinoma of the left apex with gangrene and a fatal hemorrhage preceded by others in the earlier stages of the disease.

It will be seen that the differentiation between the affection and tuberculosis, especially when softening is followed by the formation of cavities and a long duration points to the latter disease.

As regards diagnosis, this disease is difficult to define, and Wilshe remarks in his work on "Diseases of the Heart and Lungs" that one must rely much upon physical signs, as none of the other data are at all reliable.

The onset is insidious and manifests itself chiefly by pleuritic chest pains which are seldom localized. Sometimes they are associated with an increasing sense of constriction and pressure which result in real shortness of breath, and finally in orthopnoea and attacks of suffocation. A constant symptom is the persistent, dry cough, which is little influenced by opiates and is doubtless due to irritation of the terminal filaments of the vagus. In one of our patients it was difficult to understand how she could have breathed at all, so complete was the destruction of the lung, as shown by the

autopsy. Naturally there will be progressive emaciation, especially when there is much vomiting. This symptom is also dependent upon the same reflex cause. The apparent external changes in the lungs and thorax are also of importance, especially the circumscribed protrusion of the chest wall which, though not always present, often affords us an important clue. When the disease is so far advanced that the whole lung, as in Heyfelder's case, is infiltrated, and the thorax, muscles, ribs and glands of the clavicle and axilla involved, then is the diagnosis attended with no great difficulty.

Percussion discloses a one-sided and often peculiar dullness with clear sounds under the clavicle, while there is a firm resistance to the finger not often observed in other diseases.

This circumscribed dullness of the anterior chest wall excludes exudative pleuritis, while the almost suppressed respiratory sounds, which resemble isolated cases of trachial breathing from compression of the bronchi, decide against tubercular disease. The latter affection, however, oftentimes obscures the diagnosis, inasmuch as it occasionally exists in conjunction with carcinoma, while the presence of tubercle bacilli often complicates it still more.

In the case referred to even had this peculiar percussion evidence not convinced us of the presence of cancer; we could not have been criticized. The absence of fever was the only symptom excluding tubercular disease, and even at the autopsy the size of the deposits was the only macroscopic evidence of cancerous disease.

In the second place the exudative or circumscribed adhesive pleuritis must be excluded. Diminution or complete absence of vocal fremitus, enlargement of the thorax and diminished or indistinct bronchial breathing may suggest pleuritic trouble. Even exploratory puncture does not always decide the question. If the needle enters solid tissues and no fluid appears cancer may be considered probable, though adhesive pleuritis may be excluded by the character of the percussion and the other symptoms. If clear fluid can

be aspirated the disease is generally pleural, but if serous the diagnosis is doubtful. Reynaud asserted years ago that the latter indicated cancer, but we now know that this kind of fluid may be found in tubercular disease of the parts.

We are here aided materially by the microscope, in fact Erlich and Schwalbe have succeeded in finding large polymorphous cancer cells in the fluid exudate. Lenhartz aspirated from a woman fifty-eight years of age 600 c. cm. of a dark, chocolate-colored fluid which was characterized by its great quantity of cells, especially large degenerating, granular fat corpuscles. This case was one of primary endothelioma of the pleura.

Fränkel asserts that one is justified in a diagnosis of malignancy when these peculiar fat cells are present in the pleural cavity, but is less certain as regards the same appearances in the sputum. He has observed similar cells in the urine in cases of carcinoma of the bladder.

In regard to the expectoration, Hampel was able in one case to make a diagnosis with some certainty by means of the sputum, which had a pinkish, gelatinous appearance and contained cancer cells. Betthart found the following characteristic condition of the expectorated material. Beside a large number of blood corpuscles enclosed in fibrous reticular, were numerous free fat corpuscles and finely granular round cells. But especially a number of free or closely joined layers of large round cells which contained either one or three to four nuclei—each of the latter having from one to four nucleoli. The form of these bodies was usually round, but sometimes long or with round corners. They were found either isolated in the mucous network or in irregular groups.

In our own cases we were not in a position to confirm these findings, as no expectoration was observed at any time. However we might call attention to one condition which was very striking—that is, the loud transmission of the heart sounds through the swelling. This point has already been suggested by Von

Curschman in the differential diagnosis of pleuritic exudates and thoracic growths, and later by Beck in a case of primary carcinoma of the lung.

Among the secondary symptoms may be mentioned first of all the swelling lymphatic glands, which in the axilla and supra-clavicular fossa may attain a considerable size. There may also appear pressure signs arising from implication of the trachea œsophagus and large vessels of the chest. Also a sudden œdema of the upper half of the trunk, or perhaps one side only, which extends downwards as far as the insertion of the diaphragm. Distension of the subcutaneous veins. Hoarseness, resulting from laryngeal catarrh or compression of the recurrent laryngeal nerve. Difficult deglutition, severe neuralgic pains and paresis in branches of the brachial plexus, and finally stenosis of the air passages. To these may be added the hectic fever and profuse perspiration, while the skin assumes the pale, bronzed appearance characteristic of the disease. The progress of the affection is chronic in character, its duration being, according to Kohler, from one-half to two years, though it may terminate much more promptly. It is invariably fatal, and death results either from exhaustion, hemorrhage or suffocation.

The treatment is, of course, only a symptomatic one and operative measures offer no hope of cure. Kroenlein, who in 1883 operated twice upon a case of this kind, made a third attempt in 1887, removing a mass the size of a man's fist which had appeared on the original site, and dissecting at the same time a part of the lung and thoracic wall. But in the case of primary carcinoma of these parts an operation is not to be considered.

I have thus endeavored to describe and illustrate this grave affection, which by reason of its bad prognosis and general hopelessness possesses a scientific rather than a practical interest. However, the paper may serve to render the recognition of the disease more easy and less often mistaken for other and less grave affections.

LESIONS OF TENDONS AND MUSCLES.

BY GENEVIEVE CLARKE, M. D.,
CAMBRIDGE, MASS.

Presented to the College of Physicians and Surgeons
for the degree of Doctor of Medicine,
June 21, 1899.

A TENDON consists essentially of very close, parallel, fibrous, tissue of pearly white appearance. These fibres are so arranged that they form a firm cord which at one extremity is attached to the bone, and at the other receives the insertion of the fleshy fibres of the muscle. In connection with a few muscles as the digastric, the tendon is attached to fleshy fibres at both extremities. Compound muscles may have only one gaster and several tendons, as the flexors of the fingers and the toes. Compound muscles may have, of course, several bellies and tendons.

Tendons are almost always inextensible, from the fact that they do not contain to any considerable extent that peculiar variety of connective tissue consisting of a network of slender, elastic fibres which are capable of being affected only slightly by acids and alkalies. For the support of these tendinous fibres is the connective tissue, which is a formation of a thick, external sheath surrounding them. This external envelope supports the blood vessels and lymph channels.

On account of the absence of elastic tissue in the tendons, powerful action or severe strain is more likely to cause rupture in them than it does in the tissues of the muscles themselves. Injury may be due to direct force, as in dislocation, while partial or entire division may occur in wounds or by subcutaneous sections. When rupture of a tendon takes place or when division by subcutaneous operation is effected, the part which is attached to the muscle becomes separated at a variable distance. The space intervening may measure an inch or more. One end of the tendon may be the only part that undergoes retraction while the other remains as before. Blood may be poured out between the severed portions, but not to such an extent as takes place in an accidental tear of the muscle. The attending pain is

not often severe. The sensation manifested is similar to that which is felt on the inflicting of a blow received over the affected region. The patient may distinctly hear or recognize at the same time a loud snap incident to the injury. He may also experience cramps or involuntary contraction of the muscle; this may be attended with inability to use the part. The objective signs of rupture of a tendon may be observed by palpation. There will be noticed a gap with depression at the seat of the overlying area between the severed portions of the tendon; this will be especially marked when the limb is extended. It is said that the tendons most prone to rupture are those connected with the rectus femoris, tendo Achillis, and those of the triceps and biceps of the arm. To my knowledge there has recently occurred a case in which rupture of the external oblique from the connection with its aponeurosis has taken place.

The muscle, unlike the tendon, possesses to a certain degree, the power of contractility. Haeckel tells us that it is only in the most highly developed plant animals that muscle element and nerve tissue are formed. Nerve tissue first appeared as a combination of common nerve and muscle tissue. This element has been termed *neuro-musculum*.

Subsequently, the muscle tissue, separated from the nerve tissue, Nerve tissue is derived from the skin sensory layer, while the muscular tissue, in general, springs from the skin fibrous layer. The development of muscular tissue first took place in the lower forms of life by reason of the effort of the organism to extrude effete matter from the cellules. The accidental act becoming inherent undoubtedly first gave rise to the development of the muscle sense.

Muscle in its highest development, as before remarked, occurs in two forms. The involuntary muscle is composed of fibre cells and a semi-fluid containing a rod shaped nucleus. The entire structure is surrounded by a delicate, hyaline sheath. The fibre cells firmly united by a cement substance are deposited in fasciculi. The bundles are united by connective tissue, which supports the blood

vessels and nerves. The voluntary muscle fibre consists of the sarcolemma, the muscle nuclei, and the muscle substance. The voluntary muscle fibres differ from the involuntary in having transverse striæ, which give to the tissue its characteristic appearance.

When rupture of the muscle occurs on account of the power of resistance possessed by the fibres of the muscle, it is generally at its attachment with the tendon, but when the vital contractile power has been overcome by diseased processes then the muscle loses its power of resistance over the tendon. Rupture of muscle takes place in some involuntary act when the force is applied to one or two muscles, but it may happen that only a few fibres of the muscle undergo degeneration. The rupture of muscle, unlike the injury which occurs in tendon, may be accompanied with extreme pain and with noticeable inability to use the part.

When it is seen how prone the fibres of the tendons are to undergo rupture and with what frequency the gaster of muscle may through injury become impaired, it will be realized how important becomes the question to be discussed in regard to the influences for the development of the muscular system as is offered for persons connected with the numerous gymnasia that have sprung up among our schools, colleges, and Christian organizations.

The benefit of the development of muscle is only in proportion to the strength of its attachments. One of the dangers incident to the enlargement of muscles, especially of those connected with the thorax and abdomen, is found in the fact that the aponeurosis and tendons are not in each instance strengthened correspondingly. The muscle may increase in size, that is, its connective tissue and also its blood vessels, veins, and arteries may enlarge on account of proliferation and cell development, but the tendons and the aponeurosis may remain quite limited as regards increase of structure.

An illustration of this fact may be noticed in the enlargement of the uterine system during gestation. On making careful inquiry as to the condition of the uterus, the result of

subinvolution, the fact is revealed that the ligaments as guys have become inefficient in function. It may properly be said that the development of the uterus during pregnancy is for the nourishing and supporting of the fetus and for finally aiding in its extrusion. If, however, any accident takes place so as to prevent prompt retrograde processes of such tissues the uterine connections are liable to become stretched or distended. The broad and round ligaments are no stronger merely because the uterus has become enlarged. Such evolution of tissue may be attended with increase of stroma and of blood vessels, without furnishing corresponding strength of development in the attachments.

The advantage of the increase of the muscular element of the gymnast can only result in aiding in attempts at preternatural exercise. If, however, much precaution is not taken the fibrous elements are liable to undergo relaxation of structure and thus become not only the source of suffering but be destructive of the very ends that may have been in view for their most efficient use. Some one has aptly remarked that the beneficial results gained by the gymnast from his training will only continue from three to five years. This may be explained on the principle that the developing excess has been carried only along certain lines or into particular portions of the organisms. The weakness of the tendon and other structures above mentioned is an illustration of the fact. This important feature in the physical training of the youth is too often overlooked. It must not be forgotten that the strength of a chain is to be determined by its weakest link. The benefit of the development of muscle is only in proportion to the strength of its attachments. There is no special gain in multiplying the power of the ship's hawser unless its holdings are formed in proportion. There is no object in weighting one-self with large muscles. The kangaroo has not been noted for dimension of muscular tissue yet it possesses firm and most important tendons, and is endowed with prodigious strength. Man is liable to have rupture of tendon from over-

growth of muscle. Large muscles and tendons are at best more or less slow in the process of recovering from injury.

In conducting exercise for muscular improvement one of the chief points to be kept in view is the measure of difference in the effect of such training upon the voluntary and the involuntary muscles. The muscles of the limbs are regarded as voluntary; they may by certain exercises become developed to twice their usual size; they will when the exercise is discontinued take on retrograde changes. With the involuntary muscles of the heart and lungs it is far different. Increase of size and power may be expected to follow under well regulated continued exercise. There is, nevertheless, a limit to which such progressive alteration can be safely carried.

It should be noted that the increased size of the involuntary muscle does not readily lessen after discontinuance of undue exertion. In carrying out a plan for developing the muscular system, injurious effects to the muscles of organic life, as those of the heart and the fleshy fibres of the stomach, may sometimes take place. It is more particularly in the circulatory and respiratory systems that derangement may follow excessive activity and not in the muscles of animal life.

Any exercise, however methodically carried on can be expected to work only to the advantage of a particular class of muscles. This may often result, to the expense of other groups of muscles, which may call for a due share of attention. The fatigue that may be experienced when holding a weight in the hand extended is due no doubt to the pressure that takes place on the involuntary muscle of the blood vessels furnishing energy to the muscle that is engaged. Prolonged pressure may produce an arrest of supply of blood to the limb, while contraction of the veins are accelerated in their effort to free themselves from excessive enlargement. The nourishment and power of muscle depend on a due and regular supply of arterial blood. In long continued contraction this power is, as can be seen, materially interfered with. In those

exercises which bring into play extended groups of muscles, fatigue will of course be much more quickly experienced by the disturbances that may be induced in the function of the organs of respiration. The fatigue takes place because the arterial blood is prevented from entering freely the muscular tissue while the medium of the venous system preserves its motion toward the heart. During this condition the whole function of the cardiac vessels becomes deranged on account of the extra work imposed upon the structures involved.

The power of accommodation to such changes in the function of organs varies more or less in different persons. The moderate exercise that one person often takes may, if indulged in by another, superinduce serious injury or lesion.

The cardiac derangement may result suddenly when voluntary efforts have been those of an overstrain. The disease of the heart may result from more moderate activity or from long continued or repeated exercise. Cardiac dilatation and consequent hypertrophy are the characteristic lesions. In speaking in this connection it may be remarked that the muscular substance of the arteries may through excessive activity undergo an atheromatous change. The fact especially to be borne in mind is that muscles of animal life may appear for a time in a healthy condition, while the heart, arteries, and lungs will be overburdened in the effort to eliminate effete matter. The condition, however, cannot continue long without incurring a liability to the extension of the change.

So far as regards treatment it may be said that an early recognition of the rupture of a muscle or its tendon is essential for effecting favorable results. The part should be placed in such a position that the detached muscle may be as fully relaxed as possible; this should be done in order to favor the approximation of the divided ends. Immobilization and a proper degree of compression should be maintained for the purposes of overcoming the retraction and separation that are so liable to take place during the period necessary for repair.

When called to the treatment in injuries involving accidental division of tendons with the integument overlying the punctured wound, the deeper parts after being exposed, cleansed, and made aseptic, should be brought together by the employment of aseptic animal sutures. If the injury to the part constitutes an open wound so as to expose the divided tendons, the tissues are liable without the exercise of due precaution to become the foci of infection. This would occur when rupture has taken place in the sheath of the tendon. If purulent exudation has extended into the surrounding structure the connective tissue in the vicinity may also be deeply involved.

It should be remarked again that whatever variety of sutures has been chosen for use the most essential feature in the treatment to be observed is to keep the wound free from the invasion of micro-organisms. The use of buried aseptic animal sutures is most conducive to this end.

If catgut sutures are to be used they may be properly prepared in the following manner. According to Cushing's method the operator may choose catgut that has not been sandpapered, otherwise its strength is impaired. Keep the coils of catgut in ether, which removes the grease. To prepare the catgut for use, the coils are first rinsed in fresh ether, and after wiping are unbound, the cords stretched and cut in suitable lengths. Only one or two ligatures are put into a single glass tube, which is then thoroughly dried at a gentle heat. The tubes are suitably corked and baked in a sterilizer for one hour at 140°C. The apparatus should be left to cool until next day, when the sterilizer is heated again for one hour at the same temperature. A solution of nine parts of absolute alcohol and one part glycerine should be prepared by boiling, to be placed in each tube when the oven is opened under due precautions. The ligatures should be covered by the solution. The tubes are then firmly recorked and are ready for the surgeon at the required moment of the operation, when the nurse removes the cork and holds the tube for the operator to remove the catgut by sterilized forceps. The glycerine

used in preparation, makes the catgut supple, while the baking tans the animal ligature so that it is not too readily absorbed. If a tube contains two ligatures and only one is used, the other ligature is not to be considered as sterilized at a future time.

Instead of catgut there may with greater success be employed the tendon of kangaroo. Among the important advantages to be derived from the use of tendon is that it can be split up into fine threads and be reduced to almost any required size. It is not unlike the tissue which it is designed to unite. The mode of the preparation of this most valuable of all articles for the closure of wounds I have found is much more complicated and requires larger practical experience. An objection put forward against its employment has been on account of greater expense attended in its purchase. This, however, should not be regarded as well founded when the superior advantages which it affords are considered.

When animal sutures are used the external wound for the most part may be closed without a resort to drainage, provided antiseptic technique has in all its details been properly carried out. When an open wound is to be treated, and septic infection involving the tendon with inflammation and suppuration has declared itself, the management should be instituted in accordance with the rules that govern the treatment of injuries generally.

Before an operation is attempted for the suturing of tendinous tissue the parts, as before remarked, should be thoroughly cleansed and measures should be taken, if necessary, to overcome sepsis. In case a cicatrix of a wound has occurred and there remains marked impairment of function as the result of imperfect closure, the parts may be exposed by free incision. The divided ends of tendons which have become adherent should be freed and freshened; they should then be coapted and sutured. In case the approximal fragment cannot be found the distal fragment may be attached to contiguous tendon with the purpose of recovering partial use of the tendon. If the distal fragment is so extensively attach-

ed to the cicatrix that its isolation is not indicated the proximal fragment may be brought down to the cicatrix. In case of severed tendons of the phalanges there may be paralysis of the extensors, although this may not be complete through the action of the interossei. The fragments may become separated for more than an inch. In these cases the part should be laid open and the tendon sutured.

In dressing a wound involving the digital phalanges the hand should be placed in super-extension.

Very good results will follow this line of treatment if the technique of the operation in any of these cases is carefully carried out.

In old or chronic cases one of the greatest difficulties to be overcome in accomplishing such union is the proneness of the sutures to tear out, owing to the subsequent softening that may have taken place in the fibres composing muscles and tendons.

A PLEA FOR BOTH THE TUBERCULOUS AND THE GENERAL PUBLIC.

BY ARCH DIXON, JR., M. D.,
FORT HUACHUCA, A. T.

AT LAST, after years of neglect, the great army of sufferers from the deadly "white plague" have had something in the way of legislation done in their behalf. All praise to the New York Legislature for taking the initial step in appropriating the money for the erection of a Sanatorium in the Adirondack mountains for the treatment of pulmonary tuberculosis.

Equally as praiseworthy was the act of the Government in turning over to the Marine Hospital Service, Fort Stanton, New Mexico, for a similar purpose. The work of turning it into a modern Sanatorium is now being done, and when completed will be used for the treatment of tuberculous sailors and marines. And, if reports are true, Surgeon-General Sternberg has recently selected Fort Bayard, New Mexico, as a site for a similar institution where the tuberculous soldiers will be treated.

Why the tuberculous have been so long neglected and left, not only to

face certain death, but also to menace the health of all those around them, when a large per cent. can be cured by the Sanatoria method of treatment, which at the same time removes all danger to the public, is beyond all comprehension. That the example set by the New York Legislature should be followed by every state in the Union, there can be no doubt.

Time out of mind, the blind, the feeble-minded, the epileptic and the insane have been cared for by the States, and why not the tuberculous, when a large per cent. who otherwise must die can be saved, and at the same time the general public protected from its most dangerous foe?

Tuberculosis can be cured in any climate by the Sanatoria method of treatment, but the more suitable the climate the greater will be the per cent. of cures. A great number have been cured in the Adirondack mountains, and the same can be said of the mountains of North Carolina, but hardly any other part of the United States, except the Southwest, offers the suitable climatic conditions for the successful treatment of pulmonary tuberculosis.

In the Southwest, namely Arizona, New Mexico, Northwestern Texas and Colorado, are to be found all the climatic conditions having a curative influence on tuberculosis, viz.: a maximum amount of sunshine, a pure, dry atmosphere, altitude, and a porous soil.

Land is cheap and favorable sites for Sanatoria are to be found in abundance in this section. Now, why wouldn't it be feasible for States having unfavorable climates for the successful treatment of tuberculosis to secure land in the above-mentioned section and erect thereon Sanatoria for their tuberculous instead of within their own borders?

Wouldn't the greater number of lives saved, the greater number of hopeless invalids returned to the producing class, the greater security from infection by this plan, more than pay the additional expense it would incur? The tuberculosis craze is abroad, not only throughout the land, but throughout the world, and now seems an auspicious time for

the profession to urge proper legislation. When the public becomes educated to the fact that tuberculosis is a contagious and a preventable disease, and as to the means of prevention; when the different States provide Sanatoria for their tuberculous; when the general practitioner learns to diagnose incipient tuberculosis and becomes honest enough to tell his patients their true condition, and advises them to go where they will have the best chance of recovering, then, and only then, will we be able to successfully contend with the greatest destroyer of mankind.

July 15, 1899.

P. S.—Since the above was written I find that Massachusetts has also a state institution for the treatment of tuberculosis.

UPON THE USE OF ETHYL CHLORIDE AS ANÆSTHETIC.

BY ARMY SURGEON J. WIESNER, M. D.,
OF THE K. & K. INFANTRY REGIMENT,
NO. 67.

(From the Innsbruck Surgical Clinic of Professor Hecker.)

BEING at the head of the above named clinic from October, 1898, in which clinic, as is well known, a systematic practice of the anæsthesia by means of Ethyl Chloride was first undertaken, I had ample opportunities of observing the application of this anæsthetic, as I had as material for my observations upwards of 400 operations which were effected there. I was quite amazed to see the rapid effect of the anæsthetic, and the equally rapid recovery of consciousness as soon as the mask was withdrawn from the face.

These advantages gave me the idea of the possibility of applying this anæsthesia to operations on the field of battle.

The publication of this memoir appears to me to be justified by the fact that the question of anæsthesia is always one of the greatest interest to each surgeon, and it appears to me greatly to be desired that experiments should be made with this anæsthesia by properly qualified army doctors.

Ethyl Chloride (chlor-ethyl), Monochloræthan, *Æthylum Chloratum*

C_2H_5Cl , the Kelene of the French house Gaillard, Monnet & Cartier, is an extremely fluid liquid of a strong, ether-like, special odor; it boils at the low degree of $12.5^\circ C.$, and any particular part of the body can be cooled with it to $35^\circ C.$ The Ethyl Chloride is manufactured on a large scale by heating Ethylic alcohol with hydrochloric acid under 40 atm. pressure to $150^\circ C.$ On distilling the product of the reaction, the Ethyl Chloride is driven off, then the product having been made anhydrous is again distilled and collected into a vessel which has been rendered exceedingly cool.

Hydrochloric acid is only found in decomposed products.

Ethyl Chloride is not easily soluble in water, but may be easily dissolved in alcohol at 0° . It has the specific weight of 0.921, and it boils, as has been said above, without solidifying, at $29^\circ C.$ It volatilizes at the ordinary temperature without residue; if the vapor is passed through water it should not redden blue litmus paper, nor should it cloud at once on being acidulated with nitric acid and a solution of nitrate of silver. (1)

In regard to the technics and execution of the anæsthesia with Ethyl Chloride—as the above cited clinic has employed the term Kelene anæsthesia I will use the same term myself—directions are given in the corresponding papers of this clinic (2) and of certain dentists (3). I will confine myself here to giving the results of my own observations.

In one-half to two minutes—according to the age of the patient or whether they have been accustomed to large doses of alcohol—the anæsthesia is complete. I have even heard persons under the influence of the anæsthetic answer questions without having the slightest recollection, on recovering consciousness, of the conversation they have taken part in. I have observed a period of excitement only in alcoholic patients, and even then not generally in a high degree. Only in one case was an anæsthesia impossible on account of the excitement. Never did feebleness of the heart, falling back of the tongue, difficult respiration with its

consequent asphyxia present themselves.

If a disagreeable awakening of the patient occurred during an operation it was always due to the fault of the doctors entrusted with the execution of the anæsthesia.

With the withdrawal of the mask, consciousness returned immediately, and I have seen out-patients go home alone unaided after the completion of the operation. The patients complained of headaches occasionally. I have never known, except in children, a complete diminution of the muscular reflexes. There is no complete relaxation of the muscles, and for such operations as require this the anæsthesia with Kelene is undesirable. Nevertheless, the diminution of the muscular tension is sufficient to arrange even severe luxations, or, in fractures of the patella to enable the widely-separated parts to be brought together.

In Professor Hecker's clinic the Kelene anæsthesia is employed for operations of a short duration, and whenever it does not seem advisable to use chloroform or ether, as in high degree of interruption of the circulation, fatty degeneration of the heart, disease of the respiratory organs, cachectic persons enfeebled by a great loss of blood and suffering from nervous shock. In these cases it is necessary to work very rapidly, and the Schleich infiltration cannot, therefore, be employed.

Recently the Kelene anæsthesia was employed for operations of a longer duration—as much as fifty minutes—without any bad effects whatever resulting.

In none of the 200 cases which came under my own observation does there appear to have been any bad appearance, accidents or results. Vomiting was also very rare. In the same way, certain patients which have been narcotised several times, showed no such repugnance to the Kelene anæsthesia as is the case with chloroform or ether patients.

If I recapitulate briefly the advantages of the Kelene anæsthesia—rapid action of the anæsthetic, absence or short duration of the period of excitement, immediate return to consciousness and the possibility of em-

playing it for persons enfeebled by excessive loss of blood or by shock—and put against these disadvantages—absence of complete relaxation of the muscles and unsuitability for operations of long duration owing to the easy awakening of the patient from the insensibility—there is a certain balance which speaks in favor of the Kelene and seems to justify its application on the field of action.

The regulations for the sanitary service of the K. & K. army, Part IV, says in Article 133: "In general the chief task of the ambulance staff on the field is to prevent dangerous conditions from developing and to get the wounded ready for transportation as quickly as possible." We shall thus be enabled in the ambulance department, as well as in other places, to undertake trepanning for fractured skull, tying up bleeding and ruptured vessels, amputations or crushed limbs, and tracheotomy. Soldiers who are wounded in this manner cannot be kept waiting until they arrive at the hospital, even if they could be transported in such a condition.

Habart has called attention to the immense importance of rapidly transporting the wounded. He says: "It is my opinion that the fate of the wounded to-day is decided not by the first dressing, but by the first transportation." The wounded should therefore be operated on immediately, partly on account of the great danger to life in delay, and partly to get them ready for transportation, and this should be done, if possible, under anæsthetic. Now anæsthesia by chloroform requires fifteen minutes for its accomplishment, and ether even more. The loss of time involved in the uses of these anæsthetics is fatal owing to the great affluence of the wounded who are waiting for treatment, and to the comparatively small number of doctors at their disposal. We must also remember wounded who are suffering from the effects of a great loss of blood or the great fatigue and privations inseparable from the campaign, and who would probably succumb under the additional shock of the chloroform. Besides all this, those who have been under the in-

fluence of chloroform or ether are not fit for transport from the field for some hours, as repose and surveillance by the doctor is absolutely indispensable for them, the reflex only returning later on.

I believe that I have demonstrated that by using the Ethyl Chloride anæsthetic all these inconveniences are avoided, and that we can save time and avoid the danger of accidents and bad after effects while the wounded have the great advantage of being ready for transport immediately after the operation is finished.

AN INTERESTING CASE OF ISCHIO-RECTAL ABSCESS.

BY C. J. WHITON, M. D.,
CINCINNATI, OHIO.

THOUGH but very brief notes were taken of this case at the time, the details were firmly fixed in the writer's mind and after the elapse of nearly three months, are recalled with very little effort. The patient was an itinerant book agent who had been treated spasmodically by a number of different physicians, at different times and at different places along his route, until finally he was forced to seek temporary relief from his vocation and submit to continuous treatment. It was at this time that he came under my direction, giving the following rather singular history:

John H., American, unmarried, æt. 45, good family history. Drank to excess occasionally. Had not had syphilis. Was of a "scrofulous diathesis," having had small sores and boils break out frequently on various parts of the body. Noticed, in the early part of January last, pain and swelling in the tissues near the margin of the anus, which grew rapidly worse until he was obliged "to take to his bed." Sick five or six days suffering great pain from the swelling, at the end of which time, the latter, now circumscribed and as large as a goose egg, burst, giving vent to "nearly a teacupful" of thin, foul smelling pus. Rubbed in vaseline and went about his business without having contracted a "bill" for the services of a physician, a fact with which he congratulated himself

somewhat too prematurely. He had manifestly suffered from an ischio-rectal abscess, which had for some reason, very fortunately for him, broken through externally instead of into the rectum. The cause of the abscess, as near as could be determined, was the violent impact of the toe of a farmer's heavy boot.

Though, as previously noted, the pus in this case had not found its way into the rectum, yet it had evidently burrowed itself deeply into the contiguous tissues, forming blind sinuses, where much of it remained inclosed at the time of the evacuation. The result was a constantly drizzling discharge from the mouth of the sore; which had, of course, refused to heal, and which remained in this indolent condition for two or three weeks without improvement. At the end of this time the tissues had become deeply ulcerated and caused such pain and discomfort that the patient was forced, much against his will, to consult a physician. A powder was given, with directions to apply it every night and morning after thoroughly cleansing the diseased surface with warm water. This treatment was persisted in for nearly a month without relief, when another physician was consulted, who recommended an "odoriferous" powder (evidently iodoform), with similar advice as to its application. During the ensuing three months three other physicians were consulted at different times, and with like results, the ulcerated condition gradually becoming worse until as already stated the patient was obliged to rest from his employment and submit to continuous treatment under the direct supervision of the physician himself.

It was now the beginning of May, four months since the formation of the abscess, and the patient exhibited to me a formidable looking, foul smelling, ill-conditioned, sloughing sore, with flabby granulations, situated about half an inch to the left of, and posterior to the margin of the anus, the adjacent surface of the skin being liberally peppered with pale, yellow eczematous blisters. The edges of the ulcer presented a ragged, eaten out appearance, and the base consisted of a considerable mass of

necrosed tissue. It was irregular in contour, anfractuous, and averaged an inch and a half in depth, the longest diameter externally being somewhat less. It was impossible for the patient to sleep nights, and he had for sometime been accustomed to taking sulfonal powders. His general health was much affected, his appetite poor, and his spirits at an extremely low ebb.

The necessity for constitutional treatment was plainly apparent and the patient was at once put upon small doses of albuminate of iron—feraloid—with directions given as to his diet. The local treatment required much greater attention, it being, in fact, an exceedingly interesting question as to the best application to be used. It was evident, however, that whatever remedy should be selected must be thoroughly *antiseptic* and *stimulating* in character: antiseptic, since, by restricting the growth and multiplication of micro-organisms, the putrefaction and fermentation so noticeable in this case might be effectually prevented; and stimulating, in order to counteract the existing morbid process, and, by setting up a new action, hasten nutritive changes which must establish normal performance of function and thus obtain healthy granulations. The most excellent form of the application must evidently be that of an ointment, the anfractuosity of the ulcer making it almost impossible to reach all parts of the diseased surface with dry powder. The former, too, would not only be more readily absorbed, but serve as a protection, rendering the parts aseptic and impassable to germs, besides preserving the integrity of the granulations by stimulating nutrition. The bichloride of mercury seemed to meet these various indications more fully than any other agent, and moreover, could be readily employed in an ointment with benzo-boracic acid and other germicidal ingredients.

The base of the ulcer was first touched up lightly with tincture of iodine, using a small camel's hair pencil. The portions of necrosed tissue not destroyed by this procedure were afterwards snipped off with the scissors and carefully removed. The

whole was then thoroughly cleansed with warm alkaline water and wiped dry, after which lyptol* ointment was applied freely. With the exception of the iodine and the scissors, which required but a single usage, the above operation was repeated every night and morning. The dressing consisted simply of sublimated gauze and absorbent cotton, held in place by the ordinary spica bandage. For the eczema salicylic acid was dusted over the skin for the first day or two.

Within a week the sore was much improved, the odor was scarcely perceptible, while the mass of necrosed tissue was gone and healthy granulations had sprung up in its stead. The patient reported that there was no further pain, that he had begun to sleep nights, and that his appetite was nearly or quite restored. The treatment was continued for three weeks, during which time the ointment was applied regularly twice a day, the patient himself attending to the dressing during the latter half of this time. The ulcer rapidly decreased in size and at the end of the month, when the case was last seen, it was about as large as a ten cent piece. A letter was received from the patient, less than a fortnight since, stating that his ulcer had "all healed up nicely" within a week after he had left, and that he had attended to his business (which required much walking about) regularly every day since that time, without having suffered any inconvenience or pain whatsoever.

The success of the treatment in the above instance led the writer to adopt a similar process in a case of chronic varicose ulcer of the leg, which had resisted every method of treatment for the previous three weeks. The ulcer had been thoroughly cleansed with warm alkaline solutions, and various topical remedies applied, with some improvement, but never with a prospect of healing properly. It was the ordinary indolent sore so often seen, but perhaps more refractory than usual. Having removed all dead tissue as in the preceding case and wiped everything dry, the lyptol was freely applied as

before and covered with gauze with a thin layer of absorbent cotton, over which was placed a dry linen bandage. The bandage was removed every night and morning and the dressing reëplied. This was continued for a week—the patient having been kept on her back—at the end of which time healthy granulations had appeared and the sore was healing rapidly.

During the next fortnight, after applying the dressing as usual, the leg was bandaged with ladies' tarlatan—first starched and soaked in hot water—and drawn rather tightly in order to make a moderate compression, over all being placed the dry linen bandage. The bandage was removed and the ointment reëplied at the end of every second day, the patient performing the operation herself. She had now commenced to move about, and reported that she suffered no discomfort in consequence. At the end of a month the ulcer was much diminished in size, healing rapidly and was undoubtedly on the high road to perfect recovery, the dressing being removed only at intervals of two weeks. It would seem fair to infer, therefore, that the gratifying results obtained in these two cases must have been owing to the treatment, and that success should be attributed partly to the removal of the necrosed tissue and partly to the thoroughly antiseptic and stimulating character of the ointment used.

BLACKHEADS.—Blackheads are not, as is generally thought, dust or dirt accumulated in the pores, but consist of fatty secretions of the skin and a coloring matter. The following mixture may be recommended for their removal:

℞ Kaolin, parts iv.
Glycerin, parts iij.
Acid acetic, parts ij.
Ol. odorat., ad lib.

M. Sig. Apply this mixture to the parts at night, and, if possible also several times during the day. The blackheads will disappear when washed with this mixture and rubbed freely with a towel moistened with it, or can easily be removed after a few days.—*Tri-State Medical Journal*.

*[Composed of biocliloride of mercury, oil of eucalyptus, benzo-boracic acid and formallin.]

SOME REMARKS ON THE CHOICE OF A RECONSTRUCTIVE AGENT AFTER SEVERE HEMORRHAGE.

BY E. E. HUTCHINS, M. D.,
BOSTON, MASS.

THOUGH the effects of a hemorrhage are of course proportionate to its degree, nevertheless it is a fact well established by physiologists that even after severe loss, the watery, albuminoid and saline elements of the blood are almost immediately restored by resorption from the surrounding tissues, particularly from the alimentary tract and lymphatic system. The red corpuscles, on the other hand, are regenerated very slowly, and weeks may be required to restore them to their proper number, color and normal specific gravity; for, while other mineral substances are loosely dissolved in the fluid of the blood, the iron of the hemoglobin is closely incorporated as one of its elemental and vital constituents, without which the blood becomes practically functionless. Iron, therefore, has long been universally recognized as the hemapoietic remedy par excellence after any considerable loss of blood.

In regard to the systemic effects produced by severe hemorrhage, it will be remembered that normally the amount of blood in the body is only of such quantity that when one apparatus is in a state of functional activity, blood has to be withdrawn from other parts of the body. This is indicated by our daily experience of disinclination for active mental or physical exercise, when, after a full meal, there is a determination of blood to the alimentary canal and away from the nerve centers and muscles; and, contrariwise, of inability to perform digestion well if severe muscle- or brain-work be persisted in nevertheless. "Consequently," says Dr. Mendelsohn, "we see after hemorrhage, bodily and mental lassitude, *inability to perform well the acts of digestion*, an enfeebled action of the heart and general relaxation of all the tissues."

It will be observed that our re-constituting agent in this instance must be one that demands little or no action on the part of the stomach

to render its digestion certain. Though beef tea and meat extracts of all sorts are usually easily digested, their toxic character is now well understood, and such preparations are tabooed by the majority of physicians in cases where a hemoglobin-making agent is indicated. An eminent French surgeon not long since made the remark that "Beef tea is a veritable solution of ptomains." Analyses show that it contains urea, uric acid, creatinin, and a variety of other toxic substances; and Grijns has demonstrated that solutions of urea have a most destructive effect upon red blood corpuscles: that the latter swell up and burst as they do when exposed to the action of distilled water. Common sense itself would seem to teach us, that an extract from the tissues of a dead and decomposing animal is about the last thing that ought to be given to a patient suffering from general debility, or when already struggling against the toxic influences of a flood of systemic poison. The conclusion is reached that beef tea is simply a solution of products whose energy has already been exhausted, and acts merely as an excitant without really augmenting the bodily energy to any appreciable extent.

The particular ferric preparation to be selected, therefore, as a reconstructive after hemorrhage, is a question of considerable interest and importance; but there is absolute unanimity of opinion to-day among leading clinicians concerning the superiority of organic iron over the various inorganic salts. Kunkel's experiments upon dogs (Cf. Pfluger's Arch., LXI, 595) have demonstrated the fact that albuminate of iron is freely absorbed, and readily assimilated into the various tissues of the body. It is well-known, however, that the albuminates when taken into the stomach, must, in order to be absorbed, first undergo the process of digestion before they are in the form of peptones, which latter are the only forms of albumen ready for immediate absorption. Hence, in all debilitated conditions of the system when the digestive functions are weak and comparatively inactive, the administration of the *peptonised* albuminate of iron assures the im-

mediate absorption of its ingredients without effort on the part of the stomach; consequently therapeutic results are more prompt and lasting. This is a fact that will, perhaps, be made more manifest as studied in the subjoined clinical cases, in which a preparation of the peptonized albuminate has been used with exceptionally gratifying results:

CASE I.—Mrs. H., American, æt. 45, mother of six children, was delivered by a midwife of a healthy male child April 3. Her last previous delivery had occurred seventeen years before. On both occasions she had suffered from profuse uterine hemorrhage immediately following the expulsion of the placenta—being in the last instance almost exsanguinated. Twelve hours after delivery, when the writer saw the case and the hemorrhage was practically checked, the pallor of skin and mucosæ was remarkable in its suggestiveness of the great depletion of blood the body had sustained. For three weeks the patient lay in a state of extreme exhaustion, during which time the bodily functions were almost totally suspended. She was quite unable to nurse the child, only a minute quantity of milk being formed. None but the most delicately prepared liquid foods could be supported by the stomach, and even such were sometimes rejected, when it became necessary to afford nourishment by the rectum. Iron poverty was plainly apparent, demanding relief; and it was likewise equally necessary to stimulate in some way the process of nutrition.

Blaud's mass, as well as liquid preparations of neutral iron and manganese was tried with this two-fold end in view, but results were totally unsatisfactory—the stomach remained refractory, and at the end of a month there was manifestly no improvement.

It was evident that, to be useful in this case, the iron remedy should be predigested, and in the form of peptones in order to be quickly absorbed from the stomach; and, furthermore, should be given in small doses to be *entirely* absorbed, leaving no portion behind to irritate either stomach or intestines. Fortunately such a preparation was sug-

gested in feralboid, a peptonized albuminate of iron in tablet form which could be kept indefinitely. Four ($\frac{1}{2}$ gr.) tablets of this preparation were administered daily from this time, at intervals of four hours each, and were not only 'readily retained by the stomach, but caused the patient to improve rapidly from the outset. The pulse became stronger, the breathing fuller, and a tinge of color gradually appeared throughout the skin and mucous membrane over the entire surface of the body. The most marked effect, however, was upon the digestive apparatus: the hypersensitiveness of the stomach quickly disappearing, and a desire for more substantial food frequently being expressed by the patient.

The treatment was continued in this manner for a month, during which time the patient not only regained health and strength, but became more vigorous than usual. Though the number of corpuscles or percentage of hemoglobin, was not estimated in this case, there can be no doubt as to their marked increase after the administration of the tablets, as indicated by an almost immediate change in the color of the skin from a decided pallor to an approximately healthy glow. The cause of so severe a hemorrhage in this case may evidently be traced to the sedentary life of the patient and a general relaxation of the system.

CASE II.—Michael F., Irish-American, brakeman, æt. 19, in perfect health, fell between two cars from the top of a moving freight train, the last car passing quite over his foot below the ankle, crushing it badly and causing a very profuse hemorrhage. Though the foot was eventually saved, many hours elapsed after the accident before surgical aid could be secured, during which time so great an amount of blood had been lost that the patient's life was at first despaired of. A careful estimate with the English instrument of Gower showed the hemoglobin to be but 52 per cent. of the normal, and the red corpuscles 2,800,000 per cubic millimetre. The patient was at once put upon one-third grain feralboid tablets, four daily for thirty days, at the end of which time he had gained noticeably in muscular vigor, ate well

and began to take on his usually ruddy complexion. The corpuscular count was now again taken and registered 4,200,000 per cu. mm., the hemoglobin having increased to 80 per cent. The tablets were reduced to two per day, and after a fortnight's further treatment the patient was considered fairly convalescent; and, with the exception of his need of a crutch to get about, had practically recovered from the effects of his accident.

CASE III.—John R., American, carpenter, æt. 50, was taken on May 10, with an unusually severe attack of epistaxis, from which he had been a frequent sufferer for many years. The flow of blood on this last occasion was profuse and continued many hours, requiring a thorough plugging of the posterior nares with cotton tampons before it could be successfully checked. The patient was left so weak and exhausted that he was obliged, much against his will, to take to his bed and submit to medical treatment. The first count showed 2,900,000 red corpuscles to the cu. mm. He was immediately put upon the same tablets, prescribed in the same manner as in the preceding case. At the end of twenty days, treatment was stopped. The digestion had become perfect, a more amiable disposition appeared, and there was plenty of color in cheeks and lips, the patient's normal healthy glow being entirely regained. Examination of the blood at this time showed 90 per cent. of hemoglobin and 5,000,000 red corpuscles to the cubic millimeter. This rapid increase in the number of corpuscles in so brief a period is somewhat remarkable, and is a sufficient commentary on the value of the peptonized albuminate of iron as a restorative agent in cases of acute anæmia, when accompanied with absolute loss of both the hemoglobin and the red blood cells.

SCIATICA.—

R. Spir. of glonoin, grm. v.
Tinct. capsicum, grm. viiss.
Aq. menth. pip., grm. xv.

M. Sig. Five to ten drops, three times a day.—*Mikhailine, Med. Rec.*

CLINICAL EXPERIENCE WITH THIALION.

BY LUCIEN LOFTON, A. B., M. D.,
NORFOLK, VIRGINIA.

President Seaboard Medical Association of Virginia and North Carolina.

PROFESSIONAL pressure has prevented me from giving an earlier clinical experience with thialion.

I shall confine my remarks principally to the therapeutic value of this highly important drug, and will preface my paper by stating that thialion is a recent definite chemical compound, a laxative salt of lithia.

I believe that I was the first man to use thialion in this section of the South to any extent. I have not been careful about the selection of my patients, and wherever an opportunity presented, I would prescribe it freely. I have yet to find a case, covering an experience of nearly fourteen months, in which I used this preparation, that good results did not follow. It has been used in the various diatheses resulting from uric acid, from tuberculosis, hepatic engorgement, neurasthenia, and lastly in Bright's disease. To say that the results have been brilliant and lasting but feebly tells the story. I will now take up in order named and give a succinct account of cases mentioned above. From my case book No. 3 I take the following:

CASE I.—W. K. B., Norfolk, age 35, a liveryman. Family history negative. Personal history includes the diseases of childhood, with an attack of typhoid fever when he was about eighteen, from which he made a good recovery. After he reached thirty he began to lead a sedentary life, and, being a big eater, rapidly became quite corpulent. As his flesh grew he began to have afternoon headaches, which would invariably be followed by drowsiness and uneasy stretchy sensations in the lower extremities. Finally he developed a gout which lasted two or three years. Occasionally, dieting and a dosing of salicylic acid gave him some relief. Two years before he came to me he had suffered an acute attack of renal colic, and every sixty or ninety days he complained of passing calculi, which upon examin-

ation proved to be principally uric acid. When I first saw this gentleman he resembled very much a man who was bleeding to death with hemorrhagic piles. He was more or less stiff about the joints, had an indifferent walk, a strange expression, a continuous headache with great weakness and a constant desire to pass water. A physical examination disclosed a furred tongue and constipation; the heart and lungs were normal, likewise the spleen, stomach and intestines, but considerable engorgement of the hepatic gland was noted. An examination of the eyes, nose and throat did not account for the migraine. Upon testing his urine I found it distinctly acid, and the detection of uric acid crystals was easily recognized with the microscope. The murexide test gave confirmatory results. A quantitative analysis in a later examination disclosed a drachm and a half of uric acid from urine passed in twenty-four hours. I immediately began the use of thialion in the following manner: Two teaspoonfuls dissolved in a cup of hot water every three hours until several evacuations from the bowels had taken place. I did not regard this man's condition at all favorably, from the fact that he had despaired of ever getting any relief. He talked like a man who had run the gamut in "kidney and liver medicines," as he termed it, and a further course of treatment was money and time thrown away. He returned to my offices in two days and said the medicine "had worked" on his head, joints, liver, bowels, kidneys and bladder and was prepared now to resume his position and hold his own in the dining room. I gave him a restricted diet, avoiding all rich soups, fat meats, pastries, fermented drinks, etc. A teaspoonful of thialion was ordered night and morning, dissolved in hot water, to be drunk one hour before breakfast and supper. This was kept up three weeks, at the expiration of which time, I made an analysis of his urine, and something like fifteen grains of uric acid was noted in twenty-four hours. Three grains of iron by hydrogen had been given in a loose state three times each day. At the expiration of the fourth week the

man's natural color was in sight; he voided his urine normally, while his bowels were regular. The liver at this time was found to be free from congestion. At intervals of three or four days this patient was instructed to take a teaspoonful of thialion. Altogether I believe he consumed four bottles of four ounces each. It has now been several months since he took the last dose, and a more healthy specimen of manhood you would not care to see.

CASE II.—J. W. M., Norfolk. Female; age 42. White. Family history, negative. Personal history: Had had articular rheumatism mostly all her life. There was some ankylosis of both knees, which necessitated the patient using canes to walk. During damp or rainy weather her condition was aggravated. A teaspoonful of thialion night and morning was ordered and kept up for two weeks. She was given an occasional hot air bath of 350 F. for the ankylosed joint with subsequent massage, which easily corrected the deformity. Strange to say, I did not find any endocarditis, no valvular trouble or any endarteritis. This patient took the above dose faithfully for several weeks, and, it matters not how severe the weather or how much night air she may expose herself to, her "old trouble" still remains a thing of the past after five months.

CASE III.—J. F. F., Norfolk. White; age 37. A contractor. Family history negative. Personal history negative, with the exception of an occasional "bilious" attack, which was invariably relieved by some purgative. Two years ago he began to suffer with a drawing sensation at the nape of the neck which radiated to the frontal region. Hot and cold water alternately applied would occasionally give him relief. He had had a number of physicians to prescribe for him in Norfolk, but finally becoming despondent he went to Richmond, this State, where a noted "war surgeon" saw him. He was given a prescription containing iodide of potash, colchici and salicylic acid. While taking the medicine his trouble ceased, but when the medicine gave out he began to suffer worse than ever. He came to me and said:

"For Heaven's sake, Doctor, is there nothing that will cure headache?" After he had told me his story I admit I gave him a favorable prognosis with some trepidation. Physical diagnosis revealed nothing other than a complete anæsthesia of the skin from the protuberance of the occipital bone down to the vertebra prominens. Anæsthesia existed for two inches on both sides of this imaginary line. No impression could be made with a needle, hot or cold water or electricity. I gave him four cells of a faradic current with a sponge electrode, with no results whatever. I began the use of thialion immediately, ordering two teaspoonfuls in a cup of hot water three times each day, one hour before meals, for three days. Upon his return he said his headache had nearly left, but the anæsthesia still existed. No manner of liniments excited the nerve forces. When he returned to me in one week's time, after a wholesome massage of his neck skin, I tried the faradic current, and, much to my delight, the skin responded. I kept up the thialion, giving a teaspoonful night and morning for three weeks, together with an occasional electrical seance, and now, after a lapse of over sixty days, he met me in church last night and said he felt like a "new man all over."

CASE IV.—Mrs. S. A. T., age 44. Emporia, Va. Family history, tuberculosis, maternal side; hepatic abscess, paternal side. Personal history, has had measles and is the mother of eight children. Patient states that she has suffered for the past fifteen years with engorged liver and shows now, signs of arthritis deformans. Says she is compelled to take a mercurial purge every thirty or sixty days, and when she fails to do this her liver pains her intensely. Presumably the liver pressing upon the diaphragm gives her an occasional hacking cough and when she consulted me thought she had tuberculosis of the lungs. Physical examination revealed heart and lungs and abdominal viscera normal, save the liver, which protruded two or three inches below the costal margin. Thialion was administered night and morning in teaspoonful doses for ten days, half the dose was administered

for the next ten days at night only, and altogether two bottles were consumed—she sometimes taking a dose of the medicine during a period of six weeks. Nearly four months have elapsed since the last dose was taken and her health now is the envy of her friends.

CASE V.—Miss S., Norfolk county. Age 26. Has just left my offices, and a brief history of her case will prove interesting. Physical condition practically normal. She is of neurotic parents and is herself very much tainted. She told me some weeks ago that she had suffered from urticaria for five years and only the severest cold weather would relieve her of this condition. I tried various internal and external remedies without avail. The patient was becoming despondent, and certainly I was. It has been my experience that a good many cases of nettle rash come from uric acid poisoning and knowing that nothing so well antidoted this condition as does thialion, I concluded I would try it. Two teaspoonfuls night and morning in hot water was ordered. At first the amount was too large and nauseated the patient somewhat, but I obviated this trouble by dissolving one teaspoonful of the salt in hot lemonade. This acted charmingly. Much to my delight, and her comfort and gratitude, the nervousness and urticaria has disappeared. She continued the remedy as outlined above for two weeks and I consider her now well.

Tuberculosis. I cannot say in what way thialion acts upon localized tuberculosis, but this I know well—I get good results, and as long as you cure your patients you carry the day. Several months ago there came to my offices an anæmic lad about seventeen years of age who gave a distinct family history of consumption. A well defined osteitis of the left metacarpal bones was noted, while more or less ankylosis existed. I did not resort to any stereotyped treatment of this case from the fact that I had never gotten any satisfactory results in such cases. I concluded to go it alone and try thialion upon its merits. A teaspoonful one hour before each meal was administered in hot lemonade for a week; but during this time I gave the lad a hot air bath three

times per week in connection with massage. In ten days the acute inflammatory process had subsided and the boy's general appearance was greatly improved. Thialion and the hot air treatment was kept up for two weeks, at the expiration of which time I only employed an occasional hot bath with massage. From a helpless member the boy's hand has developed into a useful helpmate and to-day, ten months after treatment, he is earning a good livelihood in a sawmill.

Neurasthenia. When I speak of neurasthenia I mean cases of extreme nerve debility. So often is it the case that you find neurotics, who have come down to the very lowest plane of despair before consulting a doctor; and the sight as presented is most pitiable. You look for the pathology and nine times out of ten, if you are an honest practitioner, you will acknowledge that the pathology is a "will o' the wisp." All neurasthenics will tell you *why* they are neurotics, but how much confidence can you place in a person who is mentally unstrung? Specialists in sanatoria and out must acknowledge their inability to deal with this unfortunate class at times. Now where shall we look for the etiology? I believe that the majority of cases of this description are the host and hostess of too much uric acid. I further believe that we would have fewer cases of insanity if this particular field was more thoroughly investigated. I know that I have cured patients who had neurasthenia that have resisted the most strenuous efforts upon the part of good men. Whenever I am consulted for this condition I never give any *real* medicine until I have first investigated the urine.

The Urine. It is here that the profession in years to come will more eagerly submit their claims to recognition as diagnosticians. We cannot become too thorough in making urine analyses. If I had the choice of selection of only one source in making a diagnosis in any case where disease existed I would choose the urine. Thialion has done more for neurasthenia in my hands than all other medicines I know. I say this advisedly. No set rule can here ob-

tain in the administration of this compound.

Now in conclusion let me speak a word for thialion in the treatment of various forms of Bright's disease.

Bright's Disease. No one will deny that lithia is a fine diuretic, but long administration will not only cause nausea, but its effect direct upon the tubules of the kidney will cause some irritation therein. Thialion seems to possess the properties of soothing and healing the inflamed parenchyma of this organ. In acute parenchymatous nephritis thialion acts most admirably; in short it reduces the congestion and easily puts into solution any excess of salts that may be in the blood in a loose state. In these cases the liver is never forgotten. In interstitial nephritis thialion may be relied upon. While in amyloid infiltration nothing seems to give such fine results as does thialion.

Renal Colic. A few days since I prescribed thialion in a case of renal colic and the effects were magical. My success up to the present has been more than I expected. I have yet to find a case that this preparation has failed to give relief. Within the *past thirty days* I have prescribed thialion in fourteen cases which I have not here mentioned.

230 N. PAR AVENUE.

HYSTERICAL ARTHRALGIA.—Bianchi (*Annali di Neurologia*.) gives the following data, which should lead us to suspect that a case of joint pain is hysterical in origin:

Co-existence of other hysterical phenomena; painful points remote from the affected joint—often a hysterogenous zone upon the affected limb; anæsthesia about the joint; contracture of the joint, which differs from the immobility due to disease.

Besides these local symptoms we should also look for corroboration in the presence of contraction of the visual field in one or the other eye; the alternation of symptoms, such as anæsthesia followed by contracture, and this again by amblyopia; finally, the symptoms tend to become worse when an unfavorable prognosis is made to the patient.—*Medical Review of Reviews.*

THE SURGICAL CURE OF HYDROCELE.*

BY D. C. HAWLEY, A. B., M. D.,
BURLINGTON, VERMONT.

Attending Surgeon, Mary Fletcher Hospital; Secretary Vermont State Medical Society.

AT THE meeting of the American Medical Association in Baltimore in 1895, I called the attention of the profession to a new operation for the radical cure of hydrocele of the tunica vaginalis. Further experience with the operation has fully convinced me of its superiority over any other, and the fact that I am able to report a series of fourteen cases operated on by this method without a failure, warrants me, I believe, in again calling attention to the subject.

I have been able, in every case operated upon, to secure complete obliteration of the tunic cavity, thereby effecting a radical and permanent cure of the hydrocele, and this with one exception in from six to fourteen days. In one case, the treatment extended over three or four weeks' time, which fact was due to an error in the treatment and is in no way chargeable to the method of operating, as I will explain later.

The attempted cure of hydrocele by the injection method, is, in my opinion, at best an uncertain and an unscientific procedure, for the reason that the inflammatory process caused by the injection, cannot be regulated in degree. In some cases it is so severe as to produce extreme swelling and intense pain and possibly cellulitis and sloughing, while in others it is so slight in degree as to fail in bringing about adhesion of the opposing surfaces of the tunic. It fails invariably when the sac is multilocular, or when it is much thickened by fibrous or calcareous deposit.

The operation by incision, followed by drainage, or by packing the cavity with gauze is usually successful. The objection urged against it is the long duration of the treatment.

My method does not differ in operative detail from the method by open incision. The essential difference is in the after treatment. In describing

the method, I shall quote at some length from my original paper.

"The usual incision, two to three inches in length, is made along the anterior surface of the tumor, taking care always not to injure the testicle. The fluid is allowed to escape and the sac is irrigated."

The edges of the tunic and of the skin are united by six or eight catgut sutures.

"The interior of the sac is now irritated over every part of its surface by being rubbed with the finger tips. This is not done roughly but gently and thoroughly. The sac is packed with strips of iodoform gauze, the usual dressings applied and the patient kept in bed. At the end of twenty-four hours the strips of gauze are removed, and the cavity is irrigated. The entire surface of the tunica vaginalis will now be found to be covered with inflammatory lymph. Further packing or drainage is not used."

The parietal and visceral layers of the sac are now brought into thorough coaptation by manual compression. A strip of gauze is placed over the wound of incision, and compression is continued by strips of adhesive plaster, applied systematically around the scrotum. This dressing should be inspected occasionally to see that it does not become loosened. If it does so, it must be reapplied at once. At the end of five days the dressings are taken off, and are reapplied according to the condition of the case but without further strapping.

"At this time the cavity of the sac will be found to have been obliterated, the opposing surfaces having united by adhesive inflammation." The cure of the hydrocele is in fact accomplished, the scrotal wound only remaining unhealed. This will require but two or three more dressings and at the end of six to twelve days will be entirely healed. A slight dressing may be necessary for a few days longer to prevent chafing, and a suspensory should be worn for several weeks.

"The strips of gauze used for packing should be counted and a note made of the number to avoid the possibility of one of them being left at the time of the first dressing. But little swelling follows the opera-

*Read at the Eighty-fifth Annual Meeting of the Vermont State Medical Society.

tion, and I have seen no cases in which orchitis has supervened. The patient need be kept in bed but three or four days, but the scrotum should be suspended whenever he is allowed to get up."

I spoke of one case in which the treatment was prolonged to three or four weeks. This was due to the fact that one of the silk sutures used in stitching the tunic to the skin was not removed. As a result a sinus remained, which healed readily after the stitch was removed.

In my later cases I have used cat-gut sutures, thereby doing away with the possibility of a repetition of this accident.

In my former paper on this subject I urged the superiority of this operation in all cases of old or large hydrocele, but larger experience with it has convinced me that it is the best operation in all cases in which a radical cure is attempted.

This claim is based upon the fact that the duration of treatment is shorter than it is in either the method by open incision or by injection, coupled with the more important fact that a permanent cure may be counted on in every case.

The operation and treatment is the outcome of modern aseptic surgery.

In fact, immediate union of the surfaces of the sac is possible only when strict asepsis is secured, as failure on this point will result in suppuration, and the consequent tedious cure by granulation.

THERAPEUTIC USE OF CASTOR OIL EXTERNALLY.—According to the *Massachusetts Med. Jour.*, Dr. Beloll advises that castor oil be heated and thoroughly applied to the abdomen of the child suffering from constipation. He says this will often move the bowels as effectually as when the oil is given by the mouth.—*N. Y. Med. Jour.*

STOMATITIS IN SMALL CHILDREN.—

℞ Potass. chlorat., 3 j.
Tinct. myrrh, gtt. xx.
Elix. calisavæ, 3 iij.

M. Sig. Teaspoonful in water every four hours.

This prescription should not be used if there is present a condition of acute nephritis.—*Hare, Ex.*

VASOGEN IN PRACTICE.*

BY J. A. HUMPHREY, M. D.,

President Henderson Co., Ky., Medical Association.

THE purpose of this short paper is to report a few cases treated in the last four months with an entirely new preparation, and I bring it before this Society with entire confidence in its merits, believing that it is worthy of the physician's trust.

I have not been disappointed in its use in a single instance; of course a larger number of cases may, and probably will, present some failures. The variety of conditions treated by the different preparations of the remedy would seem to indicate a wide range of usefulness, while the promptness of its action renders it especially worthy of a place in the physician's armamentarium. I refer to the preparations of vasogen.

Vasogen occurs as a dark, rather unctuous, fluid of thick consistence and rather dank odor. It is a hyper-oxygenated mineral oil, or hydrocarbon, and may be incorporated with many if not all the principal drugs that are most frequently used topically, as iodine, iodoform, mercury, carbolic acid, creosote, sulphur, tar, salicylic acid, ichthyol, menthol, etc. It possesses the advantage over any other base or vehicle in that it is absolutely free from any property of coating over or gumming up the skin, and it offers the best opportunity for introducing medicines into or beneath the skin of all means at present at our command.

Iodine vasogen applied to the skin produces the characteristic yellow color, but when you examine it ten or twelve hours later the discoloration has pretty well disappeared, and the skin is not so soon irritated nor rendered hard as by the use of the tincture, thus favoring the introduction of the iodine into the deeper structures. Vasogen thus has the property of ready penetration.

Aqueous solutions do not penetrate. Alcoholic solutions harden the tissues and coagulate the albumen in the body fluids, thus hindering the absorption of the remedies. Chloroform solutions are not useful because they are apt to dissolve the

*Read before the Morganfield, Ky., District Medical Society, July 10, 1899.

natural secretions of the skin, and by the exposure thus occasioned may set up a dermatitis.

Ointment bases all act, more or less, as a coat of paint—lanolin, perhaps, least of all—and are useful only when a surface action is expected. They all occlude the skin more or less, and the drugs thus applied never thoroughly reach the deeper layers of the skin or the subcutaneous structures.

In vasogen we have a preparation that does penetrate, that does not harden the skin, and is not, *per se*, an irritant, thus offering an ideal vehicle or base for the topical employment of drugs that have heretofore been employed with limited effect.

I will report first the case of a female, age 19, who sustained an injury to the right sciatic nerve by a fall upon the floor of a skating rink. A constant pain reminded her of the accident, but did not render her an invalid for some eight or ten weeks, at the end of which time she suffered a very troublesome attack of nervous prostration and sciatica, which latter persisted for several weeks in spite of internal medication. Lini-ments, lotions, blisters, heat and cold, hypodermic administration of morphia, atropia, nitroglycerin and carbolic acid, nerve pressure and nerve stretching, too, were employed without avail; the pain persisted and the leg began to waste away, so that the condition was becoming an extremely grave one.

Just here the iodine vasogen was brought to my notice, and I at once began its use by injecting 15 minims deep into the hip just over the great sciatic at its exit from obturator foramen. After four such injections I began the local use by applying with considerable friction twice a day. The patient was better in a few days, and was well and going without crutches in about eight weeks.

CASE II.—Female, age 68, very nervous and with strong hereditary predisposition to nervous and skin diseases, and here I may say that I have found a very interesting field for study in the relations between nervous conditions and certain skin diseases. In this case a very pro-

nounced acute eczema appeared after a severe nervous shock in a band around the head at the edge of the hair, from $1\frac{1}{4}$ inches wide on the forehead to 3 inches on the nucha, deeply erythematous weeping, crusting and itching, and encircling the head in a painful and bandlike embrace. To procure sleep and rest an analgesic was necessary. I used ointments containing bismuth, zinc, tar, etc., and the Bulkley antipruritic powder of camphor, zinc and starch, also the drop method of employing alcohol and heat, etc. Still the band wept, crusted and itched. After having stared failure in the face for some weeks, the case getting a little better and then worse, I used the mercury vasogen by rubbing in a piece the size of a pea to-day, and another on another area to-morrow, and so on, and when I had gone twice over the whole surface I had the disease pretty well in hand. The mercury very rapidly disappeared from the surface and the healing set in promptly.

CASE III.—I. C. M., female, age 17, had typhoid fever four years ago, followed by an abscess in both tibias, both were laid open and curetted, one failed to heal, as was evidenced by a slight but constant discharge of pus for three years, when from no ascertainable cause the legs began to show signs of active inflammation. I determined, after deciding that no sequestrum was keeping up the supuration, to try the effect of medical treatment until surgery was positively called for. I accordingly directed the use of iodine vasogen, and in a few days found the whole front of leg vesiculated and somewhat swollen, about four days later an oedematous non-inflammatory condition of the face and neck with some fine papulation and pruritis—other physicians thought this was iodine eruption—I did not and do not know, but it matters not except in so far that it certainly indicates a certain and rapid absorption of the iodine vasogen, as I have reason to believe that it was not due to idiosyncrasy.

I waited for the subsidence of the eruption and repeated the local use of the remedy and supplemented it with the injection through a large

needle of 15 minims of 6 per cent. iodine vasogen into the bottom of the suppurating tract. There has been no further suppuration and if it returns I shall repeat the above process.

CASE IV.—I think I have stopped the steady growth of a thyroid gland in exophthalmic goitre. The general conditions are still in a fair way to give trouble, but I think that iodine vasogen will hold in abeyance the growth of the gland and might earlier in any given case do much that was at one time hoped for in the employment of blisters, or iodine by intra-glandular injection, etc.

CASE V.—Male, age 62, psoriasis on both arms, recurring only in the spring time for several years, but has been a constant companion for last ten years.

The skin was very hard and leathery, and gave a great deal of pain by reason of the crackings and pruritis, large quantities of mother-of-pearl scale constantly scaling off and when removed down to the surface left a very hard, red, dry base, which often cracked and gave rise to considerable pain and pruritis. There being no systemic condition that might be operating to keep up the local trouble, the removal of which might remove the local lesion as well, I thought that little could be done, but by reason of the ready penetration of the vasogen preparations I determined to use them. A coat of salicylic acid vasogen was applied each day for three days, and certainly softened the hard, leathery skin wonderfully. I then scrubbed the part well with castile soap, dried and applied ichthyol vasogen. This treatment has done more to ameliorate the condition than any other treatment that has been employed, though the psoriasis is not positively cured.

CASE VI.—Is one that has worried me no little. A sub-involution of uterus of three years' standing with the consequent passive congestion of all contiguous structures and a certain fixedness of uterus on right side and a mass of inflammatory exudate upon same side. 'Tis not necessary for me to say to a body of physicians that the case was an exceedingly annoying one to both physician and

patient. The uterus had been in this fixed position since child-birth—some three years before—and the usual tampons and douches had been used to little effect. I soaked a few pledgets of wool in equal parts iodine vasogen and glycerine and packed vagina carefully every second day, and after the third packing the patient complained of a raw feeling in the vagina. I waited and used borated douche, and when soreness had disappeared proceeded again as above and noticed the uterus becoming softer and the mass in right side softer and smaller and all the tissues much less engorged, and now after six weeks patient works, the uterus floats again, held only by its natural supports and the whole condition very much improved.

CASE VII.—Was one of leucorrhea occasioned by endometritis in a retroflexed uterus. The uterus was first lifted up and straightened by means of manipulation and the sound, then the cervix was dilated to the size of the index finger and a strip of sterile gauze soaked in iodine vasogen and glycerine was passed in the fundus and left twenty-four hours. Upon removing it some little blood escaped and the patient complained of uterine tenderness. After a week I repeated the same treatment, then giving her a supporter and stem pessary. She reported in a few days complete relief from her troubles. There has been no relapse.

CASE VIII.—A large sebaceous cyst, just above the vertebra prominens, discharging upon pressure considerable quantities of cheesy material; instead of incising and peeling out the cyst I determined to try absorption, which, as a rule is not the thing to do, as with the usual agents one will fail to accomplish anything at all, but with four injections of 15 minims each four days apart of the 6 per cent. iodine vasogen, the contents of the cyst having been expressed beforehand, the entire affair seems to have been removed.

CASE IX.—One of nasopharyngeal hypertrophic catarrh, in which the condition was fast approaching a numerical hypertrophy, and was already occluding if not extending into the Eustachian tubes; I gave patient

10 and increased to 15 minims of iodine vasogen 6 per cent. in capsules, and applied same solution locally by means of an atomizer. The result was the most marked improvement I have ever seen in a condition of this kind.

CASE X.—Am now injecting a suppurating cervical gland with the same strength iodine vasogen and administering the iodides of iron, mercury and arsenic, and believe that I will get a cure without a knife.

As stated above I believe these preparations have a wide range of usefulness, and have certainly given me more satisfaction than any other remedy that has ever been brought to my notice.

ON THE TREATMENT OF CHRONIC AND ACUTE DISEASES OF THE RESPIRATORY PASSAGES WITH GUAIACOL CARBONATE AND CREOSOTAL.

BY FRITZ HÖLSCHER, M. D.,

Physician-in-Chief to the Drelkönigen Hospital, Mülheim a. Rhein.

THE treatment of pulmonary tuberculosis by means of the carbonate of guaiacol introduced by Seifert and myself in 1891, and by means of the analogous product creosotal (carbonate of creosote) recommended shortly thereafter by Chaumier, has since then taken the first place in the medicinal management of the disease. The unanimous verdict of a great number of exact and competent observers places the curative results obtained with the two drugs beyond all peradventure of doubt.

Careful nutrition, and if possible, over-nutrition, is an essential factor in this form of treatment. A dietary rich in albuminoids is to be preferred, since the large amounts of guaiacol and creosote absorbed from the carbonates effect a markedly increased decomposition of albumins in the body. The examination of the urine shows that the absorbed creosote and guaiacol, combined with sulphur, is excreted again through the kidneys. This sulphur can only be derived from the albumins; and the latter must undergo decomposition from the withdrawal of the

element. The amount of albumins corresponding to the sulphur excreted in combination with the creosote is a considerable one. A diet rich in albuminoids is therefore essential to prevent weakening of the patient whilst undergoing the creosotal and guaiacol carbonate treatment. And since these remedies do not disturb the digestion like caustic and poisonous free creosote and guaiacol, but on the contrary prevent such disturbances by stopping abnormal putrefactive processes, and increase the appetite, increased administration and assimilation of nutriment is made possible by their very exhibition.

The actions of guaiacol carbonate and creosotal do not consist in the mere stimulation of the appetite, or in their influence on the symptoms of disease only. They seem to have a direct action upon the causative factor of the malady. In the first place the impregnation of the entire body with creosote combinations renders the life conditions unfavorable for the organic etiological agent of the disease; and in the second place it favors the elimination of the poisonous products of tissue metamorphosis which cause the disease symptoms, fever, anorexia, night-sweats, etc. These poisonous products are called labile albumins on account of their marked capabilities of chemical reaction. Hence they unite in the first place with the absorbed creosote, losing their sulphur; whilst the less actively reactive normal albumins only combine later. The withdrawal of the sulphur causes further decomposition, and the elimination of the products of such decomposition through the kidneys then follows.

The dark coloration of the urine which often occurs is no symptom of poisoning, and need not alarm the patient.

After the ingestion of creosotal in large doses, free creosote is eliminated directly through the lungs; the patient's breath smells strongly of the drug.

It is agreed by all careful observers that the creosotal treatment has the following effects:

(a). Great increase in the appetite even in those cases in which previous

treatment with creosote has caused complete anorexia.

(b). Rapid and enormous increase of the body weight.

(c). Disappearance of the fever, night-sweats, and weakness after several weeks' treatment.

(d). Diminution of the cough and expectoration, and their final disappearance. The bacilli in the expectoration rapidly decrease in number.

(e). The physical signs of pronounced phthisis can be made to disappear in six months of treatment; a longer course, is, however, often required. In beginning phthisis on the other hand (apex catarrh with bacilli in the expectoration), the physical signs completely disappear after from two to three months of treatment.

The action of creosotal in acute diseases of the lungs, such as pneumonia, broncho-pneumonia, grip pneumonia, etc., is even more remarkable than in chronic cases; as is shown by the researches which have just been published by Cassoute and Corgier from the hospitals of Marseilles. Pneumonia is cut short by the early administration of large doses of creosotal; and the course of the disease is noticeably shortened when the drug is administered later on in the disease. The typical fall of temperature occurs in twenty-four hours after the administration of the drug. The afebrile condition is a permanent one if the exhibition of the creosotal is persisted in. The temperature rises, however, if the administration of the remedy is discontinued before the auscultatory signs have completely disappeared. The sequelæ that so frequently occur, and more especially tuberculosis, are completely avoided by the creosotal treatment of acute diseases of the lungs.

The use of ordinary creosote by many practitioners is not justified today, since creosotal, administered as it is in drop doses, is cheap enough to be generally employed.

The extended employment of creosotal and guaiacol carbonate at the present day will undoubtedly give us large statistical results of great interest. But these statistics will only be of permanent value if they

include none but carefully observed cases, and if they are registered in tabular form, as has been done for example by Jacob and Nordt in the *Charitt-Annalen* for 1897, with their experiences with creosotal in Professor Leyden's Clinic.

TREATMENT OF PUERPERAL ECLAMPSIA.

BY J. S. BIRD, M. D.,
HYDE PARK, N. Y.

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IT IS my belief, that it has been twenty-five years or more, since the treatment of puerperal eclampsia has been discussed, by the members of this society.

For this reason, but more especially on account of the transcendent importance of this subject, I have thought it not unfit, to offer you some observations, which I hope may serve as an introduction, to a discussion of this subject, by the other members of this society, some of whom, at least, must have had a wider experience in the treatment of puerperal convulsions, than I have had.

I shall not attempt, to give you a comprehensive or scientific review of this subject, but, with your indulgence, I shall confine myself to an account of some personal experiences, and to a statement of impressions received, and conclusions drawn, from my bedside experience during the last thirty-five years.

Although quite a large percentage of eclampsia cases recover under the treatment given them, every now and then we hear of some woman, who has yielded up her life, to this terror of the lying-in room.

These patients are always either young, or women of middle age, and, from death in these cases, when our patients are taken away, after a few hours illness, from a condition of apparent, comparative health, the family and friends, and the community at large, receive a shock, not usual, from death, from other, and more ordinary causes.

The onset, the symptoms, and the general conditions surrounding these cases, terrorize the family and at-

tendants, and are sufficient to try the fortitude of the stoutest hearted practitioner.

I believe, that in a large percentage of these cases, if left to nature, without effective interference, the tendency is to death; and on the other hand, I believe, as grave as the symptoms and conditions are, in puerperal eclampsia, that we have at our command, remedies by means of which we can, and should, secure the recovery of these patients, in a very large percentage of cases.

The importance of every practitioner being fully prepared for this emergency in practice, is self evident. A man may be engaged for years, in obstetric work, before meeting with the emergency in question, or the young practitioner may be confronted with it, in his first case; and I think the young man fortunate indeed, who does not gain the knowledge requisite for the successful treatment, of these cases, through the sacrifice of some precious life. Owing to the variety and diversity of the teaching which he gets, the recent graduate must be something more than human to be able, without experience, to sift the wheat, from the liberal admixture of chaff, which he gets from those whom we are accustomed to designate as authorities in medical practice.

In my own experience, I encountered puerperal eclampsia, in my second case of obstetrics, and while yet an undergraduate. Allow me to briefly refer to this case.

Back in the sixties, it was the custom, with the New York medical colleges, to give out obstetric cases, among the poor of the city, to their last course of students, and the one assigned to me, was down on Amity street. It must needs be a night call, as, I suppose an initiatory experience in night work, and I had been only a short time with my patient, a robust Irish woman, when she developed eclampsia.

I sent at once for a Dr. McLeod, whom we were to call in case of complicated labor. He made haste to deliver with the forceps, and besides giving some prescription, directed patient to be kept partially under chloroform by inhalation. After doing this, for most of the next day, another student and myself alternat-

ing, the convulsions ceased. A day or two afterwards, Dr. M., in a confidential and congratulatory spirit, informed us, that if we had bled this patient, this robust Irish woman, she would have died, teaching, which subsequent experience has taught me, was not only false, but extremely pernicious. Our professor, at the College of Physicians and Surgeons, the late Dr. Gilman, had taught us, that bleeding was our sheet anchor.

Between this precept, on the part of our professor, and the bedside teaching of his young assistant, whose methods might have been supposed to be more up-to-date, I have to confess that I came to private practice, with a mind somewhat unsettled, as to the best method of procedure, in the cases under consideration.

I had been some five years in my present location, before I had to cope with this enemy. My first case was across the Hudson, from my home, in the person of a young Scotch woman, with her first child. No signs of labor; patient had had several convulsions before I saw her and the spasms were getting more severe, and the woman was becoming unconscious. Uremia was evidently the cause, as there was general edema, and the urine was loaded with albumin. In this emergency I sent for my old friend and neighbor, the late Dr. William H. Hopkins. The doctor advised venesection first, to be followed by hypodermic injection of morphine. I demurred somewhat, especially to the morphine, as I had been taught that its administration should be avoided in uremia poisoning. Without wasting any words on my lack of experience and practical knowledge, Dr. H. replied: "Bleed your patient first, and then give her a hypodermic, and she will get well. If you don't she will die." That was straight to the point, and the kind of instruction that amounts to something, especially to a young man who stands in need of it, and I have always felt exceedingly grateful to Dr. H. for his assistance in this case. This patient was bled freely; soon afterwards she had a slight spasm; then she got one-third of a grain of morphine under the skin; no more convulsions; the next day labor coming on with inefficient

pains, child was delivered with forceps. The next day, two days after convulsions ceased, patient regained consciousness and made a rapid recovery, and had several children afterwards without complication.

Counting these cases, with others with which I have since met, I find the number to be about fifteen. Three of these cases have been seen in consultation, and the remainder have been under my own care; and from this experience the treatment which I advocate is as follows—the main remedies are four in number and their relative importance, in my estimation, is about in the order named:

1. Bleeding from the arm.
2. Chloroform by inhalation.
3. Chloral by the mouth or rectum.
4. Morphine hypodermically.

These remedies are all of great potency, their action is well known and can be kept well under control, and they can therefore be used with perfect safety. And I would like to say in a general way that I believe that a man's success in these cases, depends something on the spirit with which he grapples with them. If the practitioner appreciates the fact that a desperate fight is on, and that he must forestall defeat by prompt action, he will succeed; but the man who hesitates and delays will be liable to lose his patient.

1. As to venesection. This I place far above any other single remedy at our command in the treatment of puerperal convulsions, and why not?

For whatever views may be held as to the cause or pathology of eclampsia, whether depending on uremia or on other conditions, the evident, immediate cause of death is from cerebral and pulmonary congestion; and in my opinion there is no known remedy for the relief of this engorgement, which can compare with phlebotomy. And apparently it does no harm. I have been surprised to note the rapid recoveries these patients would make after a copious bleeding, even with the added exhausting effects of the convulsive action.

In my own experience, with two exceptions, all were bled. In one of these the convulsions were evident-

ly purely hysterical, and in the other one the convulsions were post-partum, and the patient had already lost a large amount of blood in being delivered of a pair of twins; and all of these cases recovered. I have so much confidence in venesection in eclampsia, some grounds for which will appear further on, that I would make it almost a cast iron rule to bleed on sight in every case, unless there be some special contra-indication. And I would make it a point that the bleeding be done promptly on the advent of the convulsive action, in order to forestall such a degree of cerebral and pulmonary congestion as is liable at any moment to be followed by a fatal effusion.

Another point that I would make is that the bleeding be thoroughly done. The blood which should be lost cannot be estimated in ounces but it should be allowed to run till we get a signal from the partially blanched countenance and the wavering pulse that it is time to stop.

Here it may be said that success in eclampsia depends not only on the use of the lancet, but still more on the vigor and on the discretion of the man behind the lancet.

Some authorities, I think many authorities, tell us that if the patient is plethoric and robust she may be bled, but if the opposite conditions exist that the lance must be withheld. As presumptive as it may seem, and undoubtedly is, on my part, I cannot subscribe to that teaching, and I wish this point distinctly understood. For I declare that general principles in bleeding do not altogether apply in these cases, for the reason that we do not bleed in eclampsia so much to relieve a general plethoric condition as we do to relieve, or to forestall, the local congestion at the brain and at the lungs; and the woman of delicate construction with brain and lungs congested needs our help just the same as the robust woman; and I have found at the bedside that one class demands the use of the lancet just the same as the other, the only difference being in the quantity of blood that it is necessary to take. I will give you two cases, one of the lean kind and one of the fat kind, illustrative and

in proof of the truth of the position which I take, the former at once and the other a little later on.

July 6, 1894, was called to see a patient who was being attended by Dr. Cornelius, who was then located at Staatsburgh. Found a young woman about twenty years of age, unmarried, of medium height, weighing 110 pounds, who had never been robust physically and none too vigorous mentally. The young woman was eight months gone in her first pregnancy. It was about 4 P. M., and the patient had been having convulsions since early morning, and they were increasing in frequency and severity. Patient was already unconscious, with a pulse rapid and not very strong, and the respiration, I think, could not have been less than forty, and it might have been fifty. It was very rapid and there was already an ominous rattle from the throat and bronchial tubes; there were no signs of labor and the Doctor states that he had found albumin in the urine.

This young woman had already had chloral in good doses, and also chloroform by inhalation, without relief.

I ask you if it would be possible for me to bring to your notice a more unpromising case of puerperal eclampsia than this? I would ask you if there could have been any doubt of the fatal termination of this case unless some means could have been found to give her prompt relief; I will ask if this was not a fair test case for the efficacy of any plan of treatment which the attending physician might have seen fit to adopt.

An anti-phlebotomist (man afraid of his lancet) might have said with some show of reason, that this was not a case for bleeding, that this poor woman, as the phrase is, had no blood to lose. And I will admit that in the aggregate this woman did not have any too much of the vital fluid, but she did have too much of it in her brain and in her lungs, a quantity quite sufficient to have taken her life unless she could have been promptly relieved. With this end in view, the patient was raised to a partially upright position and bled from the arm. It might have been

a pint, it might have been more, I don't think it could have been much less, but just how many ounces I cannot tell you; but I can tell you this, our aim was to leave only a sufficient quantity of blood in the veins of this woman, this thin woman, this delicate woman, as would be just sufficient to keep the vital machinery safely running, believing that this was the only way in which we could relieve the cerebral and pulmonary congestion, which had already become pernicious. So the blood was allowed to run till the countenance and pulse indicated that we should desist. Then believing that this woman's condition demanded that we should bring to bear every means applicable in her case, she was at once brought under the influence of chloroform by inhalation and kept there till all tendency to spasmodic action seemed to have passed, with the result that there was not another convulsion, although patient remained unconscious for some twenty-four hours.

She was soon up and about her room, when after a few days, I could not ascertain just how many, labor came on and she was delivered, without complication, of a child which had evidently been dead since the day of the convulsive attack. This woman has been in her usual health ever since.

Can there be any reasonable doubt that venesection saved this woman's life? And when a practitioner has stood by and seen even one woman rescued from a condition apparently so hopeless by the simple use of the lancet, it seems to me that he cannot be greatly censured if he pins his faith so strongly to phlebotomy, even in non-plethoric cases, that an adverse opinion from even the most commanding authority cannot shake it.

I have advised that the lancet be used promptly on the occurrence of convulsions, but this case illustrates the wonderful efficacy of venesection when its employment was deferred even to the eleventh hour.

I have been informed by recent graduates in medicine, one from Albany and one from New York, that in the treatment of puerperal eclampsia, venesection, when advocated at

all, has been given only a secondary place by their professors and clinical teachers.

One very prominent professor says: "Bleed only in plethoric cases, and then not as a means of cure, but to gain time."

The question occurs to me—"Time for what?"

One of these young men states to me that when he was house physician in a hospital in one of our largest cities that two cases of convulsions occurring in his service, to use the Doctor's own words, "were allowed to go on from fit to fit, treated only with fifteen grain doses monobromide camphor once in three hours." As a perfectly natural consequence both the patients died.

Such a proceeding as that savors either of idiocy or of criminal neglect, and this in our boasted age of advanced therapeutics.

Cases of puerperal eclampsia, treated by Dutchess county physicians, have incidently come to my knowledge, which have ended fatally, and which were not bled. I assume that these practitioners had their reason for withholding the lancet, but whether these reasons were good and sufficient, I am unable to say, but the fact remains, that these women were not even offered this chance for their lives, which phlebotomy affords in so many cases; and if they had been bled, the result certainly could have been no worse.

I believe that the use of the lancet, in eclampsia, has been practically discarded, in our large hospitals; but what results do their records show? Only last week, I saw in the *THE NEW ENGLAND MEDICAL MONTHLY*, a statement of the death rate in eclampsia cases, for 1892, in several of the largest lying-in institutions in this county, including that at Montreal. The average given was 46 deaths out of every 100 cases treated, a death rate, which it seems to me, is a sufficient comment on the treatment employed.

Concerning the second remedy on our list, the inhalation of chloroform, I will say that this is an excellent means for continuing the cerebral anæmia induced by the bleeding, and for controlling any remaining tendency to spasmodic action; I be-

lieve there are a few cases of eclampsia in which chloroform may not be used to advantage, but I believe that the practitioner who relies upon it, to the exclusion of venesection, makes a mistake, which will in some cases, prove a fatal one for his patients.

A case in point occurs to me, perhaps I ought not to refer to this case; but believing, that the importance of this subject demands that we should give to it, the most practical investigation possible, I will venture to do so. If my criticism is correct, no fault should be found; if it is wrong, let the error be shown.

This woman was in her thirties, and in confinement with her sixth child. The convulsions were post-partem, and the doctor, (whose professional standing may be said to be second to none in this county) did not arrive until his patient had had several spasms. This woman was not bled, but was treated by inhalation of chloroform. The convulsions continued, and after a time a severe one occurred, and the patient passed at once into a comatose condition from which she did not recover.

The doctor's diagnosis was a ruptured cerebral blood vessel.

Any one of us, if called to this woman might have treated her in precisely the same manner, but in the post-mortem light of the doctor's diagnosis, and of the result, the logical conclusion from which I can see no escape, is that, if the use of chloroform in this case, had been preceded by a thorough bleeding, so thorough as to have removed all cerebral pressure, and to have produced in the brain a condition of anæmia, instead of congestion, that those cerebral vessels would have remained intact, and this woman's life have been saved.

3. Next as to the use of chloral. The well known and powerful antispasmodic action of this drug, at once suggests its use in convulsions, and experience with it will, I think, justify its employment, and one strong point in its favor is that its use by the rectum, is nearly or quite as effectual as when swallowed.

4. The use of morphine hypodermically. In the use of this drug, I believe that one rule invariably ap-

plies, viz.: that before its use, the brain, should, in some manner be rendered anæmic, then, in case a convulsive tendency remains, after the use of the remedies already referred to, or, if the spasmodic action, as is sometimes the case, is kept up by the after pains, a hypodermic of morphine is useful.

These four remedies, venesection, chloroform, chloral and morphine constitute, in my opinion, the main battery, but there are adjuvants, such as ice to the head, warmth to the feet, diaphoresis and catharsis, and an antipyretic, if temperature runs high.

To the rule so much insisted upon, that the uterus should be promptly evacuated, as a means of relief, I have never paid much attention, as I believe that one's time can be better employed by working the main battery, as above indicated.

I will now refer briefly to the case of opposite physical characteristics from the one mentioned above. This was a large framed muscular German woman, and with sufficient adipose tissue to tip the scales at 200 pounds, pregnant with her third child. This patient suffered for several weeks before her confinement with symptoms of uremic poisoning, edema of legs, headache, nausea, diarrhea and marked debility, and albuminuria. My prescriptions for this condition seemed to have but little effect, the reason for which became apparent, when at birth this woman was delivered of two ten pound babies, with the usual appendages.

The labor was rapid and easy, and convulsions did not commence until four hours after labor was completed.

In the management of this case, I made two mistakes. First, I foolishly attempted to control the convulsions by chloral and chloroform; not succeeding, patient was bled, and here I made mistake number two, as not sufficient blood was taken, and convulsive action continued. The arm was unbound, and this time, the blood was allowed to run until the desired effect on the circulation was obtained, and the convulsions ceased. In this case, ice to the head, warmth to the body and feet, and an antipyretic was brought into use.

I think this woman gave me the hardest fight, of any of my eclampsia patients, as I was detained with her for about twenty-four hours. Much of this time, I think, could have been saved, if the patient had been thoroughly bled at first; and besides, I fear that I jeopardized the life of my patient, by this inexcusable hesitation and delay. This woman regained partial consciousness next day, but the next ten days have always been a blank to her, and for a year or two, she suffered from some mental confusion and weakness.

I have stated that all of the fifteen cases referred to recovered. I ascribe this pleasing result, in part at least, to the limited number of cases; undoubtedly, if the number had been two or three times as large, there would have been some fatal ones, but from this experience, and the reports of others, I am forced to conclude that the natural tendency to death in these cases may be turned back, and the percentage of deaths kept very small indeed by the means at our command. If this conclusion is correct, then we, as medical men, have the right to indulge in the comfortable and comforting thought that in the management of our eclampsia cases we find one direction in which we can, after all, be of some use in the world.

In a mental review of the physicians' experiences in this line of practice, the following reflection has occurred to me, and I hope that you will pardon me if, in closing, I give it to you.

A. Dewey, after months of preparation and supported by able assistants, enters an enemy's harbor, destroys their fleet, and on their forts raises his country's flag; and as a reward gains for himself before breakfast on a May morning, a fame which is world wide, and in his own country his name becomes a household word.

The doctor, perhaps the country doctor gets a night call, and, in prompt response, pursues his way through miles of darkness. He reaches his patient and is soon confronted by this terror of the obstetrician which we have been considering; circumstances and conditions preclude a consultation and assist-

ance, and the doctor, perhaps already exhausted by recent vigils, must fight it out alone with the Grim Destroyer. He forgets self and promptly enters the contest for his patient's life, and after a struggle of longer or shorter duration wins, and restores the patient to her family and friends. And as his reward he gets—what? Certainly not fame, but perhaps something better, for he does get that sense of supreme satisfaction which comes with the knowledge of having saved a human life; and although he has probably given up in the struggle something of vital energy which he will never get back, he has gained an added mental and moral strength with which to fight his next battle; and, besides, I like to think and to hope that in the final reckoning up of human deeds that the efforts for humanity of the doctor, the ordinary doctor, even the country doctor, will not be entirely overlooked.

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ADDISON'S DISEASE IN CHILDREN.—Dezirot (*Klinisch-therapeutische Wochenschrift*,) has observed three cases of Addison's disease in children, at Variot's clinic during the past year, and has collected from literature forty-eight instances, all told, which occurred in children from seven days to fourteen and one-half years of age. This disease rarely occurs in childhood; the etiology in almost all of the cases was tuberculosis of the suprarenals. The onset was frequently overlooked and the first symptoms appeared slowly. At first general weakness and fatigue without apparent cause showed themselves. The children had no desire for play, but were rather weak and apathetic. In other cases gastro-intestinal symptoms—nausea, vomiting, diarrhoea and constipation—ushered in the disease. The latter seems to be the general mode of onset in children. Discoloration of the skin was rarely observed at the beginning. Inasmuch as many of the symptoms of Addison's disease occur in the course of a tuberculosis, a localized tuberculosis was not infrequently found in the lungs, kidneys, glands, joints and bones. In other cases the disease assumed a

galloping type, similar to a poisoning, so that in a few months the characteristic symptom complex of asthenia, gastro-intestinal symptoms, pain and skin coloration was fully developed. The asthenia proved the most characteristic sign of the disease; it was practically never absent. The intellect was clear, but the patients could hardly answer questions on account of fear of fatigue. The gastro-intestinal symptoms were important. At first there was loss of appetite; the children showed a special desire for certain food stuffs, especially meat; nausea and vomiting of a uræmic nature occasionally occurred. At times there was constipation, and again diarrhoea. The pains were less constant. They were for the most part spontaneous, and were situated in the back, abdomen, hypochondriac or epigastric regions. The hyperæsthesia of the abdomen may be so great as to give the impression of a peritonitis. Some patients complained of severe headache and pains in the bones. The pigmentation of the skin was frequently overlooked, the parents thinking that the child was sunburnt or icteric. The discoloration was more or less uniform over the entire body; less frequently was it partial. On the exposed parts—face, neck, hands—and in those regions where pigmentation is normally greater—navel, genitals, axillæ—the eruption was darker. The mucous membranes always presented disseminated brown spots, which are for the most part so characteristic that they form a pathognomonic symptom, at least in children. Besides the cardinal signs of this disease, other symptoms, such as rise of temperature, rapid pulse, convulsions, and epileptiform attacks were observed. The course of the disease showed remissions and exacerbations. In some cases death occurred suddenly. Death usually occurred within a year, as a result either of cachexia or of intercurrent disease.—*Medical Record*.

ELECTRICITY IN INCONTINENCE OF URINE.—Dr. Capriati (*Edinburgh Medical Journal*) records a case of involuntary enuresis successfully treated by means of the currents

introduced into medicine by Morton, of New York. These are known as induced static currents, and are furnished by the oscillatory discharge of Leyden jars connected with an electrical machine. The patient is not insulated, but is connected with one of the jars, while the other is connected with the earth. The intensity of the current is regulated by merely altering the distance between the jars. Capriati's patient was a previously healthy man of thirty-five, who was gradually attacked by weakness and wasting in the left leg, with club-foot and exaggerated knee-jerk on that side. There was no reaction of degeneration, but incontinence of urine was very troublesome. The author considers the symptoms to point to limited lesion of the spinal cord in the lumbar region. At first galvanism was tried with the kathode over the dorso-lumbar spine, and the anode on the perineum; this was continued for ten minutes daily for more than twenty days without any benefit resulting. Endo-urethral faradization (Guyon) was next adopted, but was so painful that it had to be abandoned after two sittings. Finally, Morton's currents were used in conjunction with the spino-perineal galvanization. Immediate relief followed, and after the treatment had been carried out every other day for two months, a cure was complete as regards the incontinence. As galvanization by itself had proved ineffectual, the credit must be given entirely to the method of static induction. It was extremely well borne when used in the manner laid down by Bordier. A sound, the end of which formed an electrode, was introduced into the urethra as far as the sphincter of the bladder, and its free end was attached by a chain to one end of the Leyden jars; the machine was regulated to give from six to eight sparks a second, and each sitting lasted five minutes.—*Ex.*

TREATMENT OF LUPUS WITH X-RAYS AND WITH CONCENTRATED LIGHT.—Hermann Kummel (*Arch. f. Chir.*) The author gives only his present results, as the time of observation is still too short to draw final conclusions. Of sixteen patients treated

only twelve are reported. In one of the twelve reported cases lupus of the fingers was cured, but later the finger was amputated owing to caries. In another case with supposed lupus of the nose the X-rays had no effect, the case proving to be syphilitic. In the remaining ten cases good results obtained. The process of healing was of short duration; there was no pain. There is no specific action of the X-rays upon lupus, as Finsen obtained good results with concentrated sun and electric light, and according to the author's experiments cultures of tubercle bacilli are not impaired in vitality by exposure to the rays. The effect is probably due to an electrochemical process or to a trophoneurotic action. It is preferable to treat large surfaces of lupus with X-rays rather than with concentrated light, as the resulting scars are smoother.—*Ex.*

GENERAL INFECTION BY THE GONOCOCCUS.—Ahman (*Archiv für Dermatologie und Syphilis; St. Louis Medical Gazette*). In the case recorded by the author, five days after the beginning of the gonorrhoea the patient presented the signs of a cystitis and an arthritis of the wrist and of the tibio-tarsal articulations, accompanied by a slight fever. Bacteriological examination, of the fluid obtained by puncture of the tendon of the right anterior tibial muscle showed a pure culture of the gonococcus. Gonococci were also found in the blood and in the ascitic fluid. In order to verify the demonstration made with the gonococci in blood-serum culture, the gonococci were injected into the urethra of a man who wished to undergo the experience of having gonorrhoea; in a few days, as a result of this inoculation, the man gave evidence of a gonorrhoeal discharge from the urethra, and, in turn, synovitis of the tendons of the pedal muscles; the exudate from this synovitis also showed the gonococci present in pure culture, thus fulfilling all the three postulates of Koch in the establishment of the existence of an infectious disease.—*N. Y. Medical Journal.*

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William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

TYPHOID FEVER STATISTICS.

THE unusual prevalence of this disease in various parts of the country, in several of the large cities, has been one of the medical features of the past year, and has aroused considerable comment among sanitarians generally.

The statistics, as recently presented by the New York State Board of Health, serve only to confirm the previous local reports, which have heretofore been presented from time to time. The following summary, recently published, gives a fair idea of the conditions prevailing in New York State:

It is noticed that the death rate from typhoid fever in the States of this country where careful records are kept is higher than in certain countries of Western Europe. Typhoid fever is usually more prevalent in rural districts than in cities. The rate in the small towns and country districts in this State was, in 1897, 149, and in 1898, 174 deaths in 10,000.

The cities of the State do not all of them have a lower rate than the rest of the State, and the State Board in a tabulation of the death rate figures, groups them for convenience into three classes, those having a rate below that of the rural districts, those having about the same rate, and those having a decidedly higher rate. In the first class, cities having a low rate of deaths in each 10,000 deaths in 1897, are placed, New York, Brooklyn, Yonkers, Utica and Auburn; in the second class, Buffalo,

Rochester, Syracuse and Troy, and in the third, Albany, Elmira and Binghamton. The Board says that in most of the cities, as in the State at large, there was in 1898 a decided increase of deaths from typhoid fever, and six of the twelve cities had a higher rate than the rural districts the same year.

Rochester and Yonkers alone had a decrease, but in New York and Auburn the increase was slight. The most remarkable increase was in Troy, which on the basis of last year's returns, should rank with Elmira, Binghamton and Albany as unusually exposed to the disease.

While it is not always possible to define the true causes of these outbreaks, it is quite apparent that in some instances the water supply was inadequate and faulty, and that milk offered another source of infection. Moreover, the character of some of the local Health Boards was in some instances of a purely political character, and hence worthless, or nearly so.

Epidemics of typhoid fever are in all cases a reflection upon local boards, and may be considered an almost indisputable evidence of carelessness or inefficiency.

SICK CHILDREN AND LOCAL CHARITIES.

THE inevitable sickness and mortality at present existing among the children of the poor in large cities, has resulted in various benevolent plans for the amelioration of this condition. Chief among these is the supplying of milk and other foods, and provision for outings and more or less protracted sojourns in healthy localities.

It is found, however, that the details of these projects are difficult to carry out, for, at the time when funds and other aid are most needed most of the wealthy class are out of town as well as most of those who are interested in private charities and benevolent work.

Work of this kind is best done by the regular organizations, and were they properly equipped and sufficient in number the want and suffering in these localities would be reduced to a minimum. We trust, therefore, that the well-to-do will give ear to the appeal now being made by the local charities for funds for the furtherance of the work in question.

IN YE OLDEN TIME.

ALITERARY work which will prove interesting to many members of the profession is that now being published by R. Herndon & Co., of Boston, entitled "Universities and Their Sons"—a series consisting of five volumes. The first volume has just appeared and contains a complete history of the formation, growth and present condition of our four oldest universities, Harvard, Yale, Princeton and Columbia. The sketch of the birth and early struggles of the medical schools connected with three of these institutions is exceedingly entertaining and well worth reading.

We first learn that the New England medical student of a century ago—previous to the formation of schools of medicine—received what little technical education was then obtainable by reading under the guidance of some local physician, whom he was expected to assist in office duties, and whom he occasionally accompanied on the daily rounds of visits; and when he was considered proficient his preceptor gave him a certificate which answered the purpose of our present diploma. The New Haven Medical Society was formed in 1784, and stood at the head of medical interests in Connecticut for a number of years. Prominent members of the Society delivered lectures which were well attended by outsiders and by some of the Yale seniors and Professors. This plan continued until 1812, when

a faculty was selected and the school became an integral part of Yale.

The Harvard Medical School was incorporated in 1782, beginning with the following three chairs: 1. Anatomy and Surgery, John Warren, M. D.; 2. Chemistry and Materia Medica, Aaron Dexter, M. D.; Theory and Practice of Medicine, Benj. Waterhouse, M. D. At this time three years' study were required, two of which were usually devoted to attendance upon lectures, though sometimes only one course was taken, the longest being but four months. Students, not graduates of the college, were obliged to pass examination in Latin and Natural Philosophy before gaining entrance. It was necessary, too, that a candidate for professorship should "be an A. M., or Bachelor or Doctor of Physics; of the Christian religion and of strict morals." The degree of Bachelor of Medicine was first conferred in 1785; that of M. D., in 1788, on John Fleet. One anatomical specimen for the class, per term, was all that could be afforded, and clinical cases were selected from the private practice of the Professor himself.

In New York, medicine was much further advanced in the Eighteenth century than in New England. As early as 1767 a medical school was instituted within King's College (now Columbia) having six professors from the start. The first degree of M. D., in America was conferred by this school, in 1770, on Robert Tucker. The following plan of lectures laid down by Dr. Clossy, the first Professor in Anatomy, appeared as an "Advertisement" in the *New York Mercury*, Nov. 2, 1767:

"King's College, Oct. 26, 1767.

"On Monday, November the second, at Four o'Clock in the Evening: The First Part of Dr. Clossy's Anatomical Lectures will begin with the Usefulness of Anatomy; and will proceed to the Description of the Dry Bones, and likewise the Fresh Bones,

with their Cartilages, Ligaments and Membranes; Internal Structure, Uses, Motions and Affections; and will be continued on every Friday and Monday Evening.

After the First Part, the System of Muscles will be shown in the Adult Subject.

Part the Third, will exhibit the Arteries, Veins, and Trunks of the Nerves, in a Subject Prepared with Injections; and the whole will be concluded with

The Fourth Part, containing the Encephalon, with the Viscera of the two inferior Cavities, together with their Uses, Motions and Diseases in the Adult Subject.

Attendance for each Course to the Students in Physick, *Five Pounds*, and free after two courses.

For seeing Dissections and Preparations, *Ten Pounds*, and free after two courses.

To Gentlemen who will chuse to attend for the Improvement of their Minds, *Three Pounds, Four Shillings.*"

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Book Notices.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada, Edited by Judson Daland, M. D., (University of Pennsylvania) Philadelphia. Volume II. Ninth Series. 1899. Philadelphia: J. B. Lippincott Company. 1899.

A fine array of contributors do we find in Volume II, Ninth series. Among these: Cheatham, Cumston, Fournier, Fränkel, Gibney, Grant, Lyman, Von Bergman, together with a host of others to the number of thirty-five. We find thirty-five different articles under the following heads: Two under Drugs and Remedial Agents, six under Treatment,

seven under Medicine, four under Neurology, ten under Surgery, two under Gynecology and Obstetrics, one under Ophthalmology, one under Laryngology, and one under Dermatology.

The volume as a whole will be found useful and full of valuable matter.

TRANSACTIONS OF THE NEW YORK State Medical Association for the Year 1898, Vol. XV. Edited for the Association by M. C. O'Brien, M. D., of New York County. Published by the Association, 17 West 43d Street, New York City.

This ample volume comes to our table a welcome annual visitor. It is always filled with most excellent medical and surgical pabulum from the most authoritative source.

The volume before us holds a notable collection of valuable papers upon live topics, notable among which is that by Stephen Smith, M. D., of New York, entitled "A Method of Amputation at the Knee-Joint in Gangrene of the Toes and Foot," one by J. W. S. Gouley, M. D., New York City, on "Urethral Stricture," and one by H. A. Didama, M. D., Onondaga County, on "Diagnosis and Therapeutics."

Comparisons are, however, invidious when all the papers are so good and interesting as they are in this book.

THE MECHANICS OF SURGERY COMPRISING Detailed Descriptions, Illustrations and Lists of the Instruments, Appliances and Furniture Necessary in Modern Surgical Art. By Chas. Truax, Chicago, U. S. A. 1899.

Mr. Charles Truax presents to the medical profession a volume which cannot fail to be of interest in demonstrating the great range of mechanics in surgery. Rapid strides have been made in these directions during the last few years. The book is well illustrated—we find illustrations of almost every kind of instrument, dressing, etc. We do not believe that between two other covers can be found so much information, or the same kind of information.

The Truax-Greene Co., of Chicago, with which the author is connected, has no reference made to it in the

text, nor is the fact made known that Mr. Truax is a surgical instrument dealer.

We cannot help commending this work, for we know of no other one which can take its place.

THORACIC RESECTION FOR TUMORS Growing From the Bony Wall of the Chest. By F. W. Parham, M. D., Professor of General Clinical and Operative Surgery, New Orleans Polyclinic. Read in Abstract before the Southern Surgical and Gynecological Association, Memphis. November, 1898. New Orleans. 1899.

This volume before us, is a most elaborate discussion on this trite subject. It is profusely illustrated and shows decided advances in thought. It is an important addition to medical literature.

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Current Literature.

"The Columbia University. The Medical School. Washington, D. C. 1898-'99.

"Infection after Abdominal Operations, and Its Treatment," by Hunter Robb, M. D.

"Shock and Its Treatment," by W. D. Travis, M. D. Reprinted from *The Railway Surgeon*.

"Case of Papilloma of the Ovary," by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"The Opening of the New Lakeside Hospital," by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"The Treatment of Retrodisplacements of the Uterus," by Hunter Robb, M. D. Reprinted from *American Journal of Surgery and Gynecology*.

"Oto Massage in Suppuration of the Ear; Its Value for the Relief of Deafness and in the Treatment of the Suppuration," by Louis J. Lautenbach, A. M., M. D. Reprinted from the *Journal of the American Medical Association*.

Madame Darmesteter's recent essay on "The Social Novel in France" will be found in full in *The Living Age* for Aug. 5.

"Prospectus of the St. Louis College of Pharmacy, Thirty-Fourth Annual Session, from October 2, 1899 to April 14, 1900."

"The Intra-Uterine Application of Chlorid of Zinc," abstract by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"Suppurative Disease of the Ear," by Louis J. Lautenbach, M. D. Reprinted from *The Journal of the American Medical Association*.

"Irrigation with Salt Solution and Other Fluids in Surgical Practice," by Hunter Robb, M. D. Reprinted from *The American Journal of Obstetrics*.

"A Case of Endothelioma Lymphangiomatodes of the Cervix Uteri," by Hunter Robb, M. D. Reprinted from *Transactions of American Gynecological Society*.

"Contribution from the Laboratory of General Chemistry, University of Michigan," by P. L. Sherman and C. H. Briggs. Reprint from the *Pharmaceutical Archives*.

"Some Further Results in Treating Ears by Massage Methods," by Louis J. Lautenbach, M. D. Reprinted from *The Journal of the American Medical Association*.

"Thirteenth Annual Announcement of the Medical Department of University of Oregon, Lovejoy and Twenty-Third Sts., Portland, Oregon. Session of 1899-1900."

"Neera's" romance, "The Old House," now in course of publication in *The Living Age*, will be followed, early in September, by a story entitled "Dame Fast and Petter Nord," which Dr. Hasket Derby has translated from the Swedish of Selma Lagerlöf, the young writer whose "Gosta Berling" and "Miracles of Antichrist" have attracted so much attention.

"The Conservative Treatment of the Myomatous Uterus," by Hunter Robb, M. D. Reprinted from *The American Journal of Obstetrics*.

"Some Observations on Corneal Astigmatism and Conditions that Change Corneal Curvature," by Louis J. Lautenbach, A. M., M. D., Ph. D.

"The Influence of Extirpation of the Ovaries upon Structural Changes in the Uterus," abstract by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"The Bacteria Occurring in the Female Genital Canal and Their Relation to Endometritis," abstract by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"The Importance of Blood Examinations in Reference to General Anæsthetization and Operative Procedures," by Hamilton Fish, M. D. Reprinted from *Annals of Surgery*.

"Secondary Abdominal Pregnancy After Traumatic Rupture of the Uterus in the Fourth Month. Laparotomy. Recovery," abstract by Hunter Robb, M. D. Reprinted from the *Cleveland Medical Gazette*.

"Richly illustrated" barely describes the August *Cosmopolitan*, there being in that great number one hundred and forty-six different illustrations of all sorts and sizes and not one of them commonplace or uninteresting. The literary features of the magazine vie with the pictorial, the whole forming a most attractive magazine for summer reading.

The range of human interest covered by the August *Cosmopolitan* is curiously wide. The reader is swept along—and his journey made fascinating by one hundred and forty-six pictures—from an article telling of the trolley road now building from Cairo to the Pyramids, with some remarkable pictures of those monuments of antiquity; through a comprehensive and richly illustrated review of New York Society; to the prize article on "Your True Relation to Society;" and thence to Ireland to listen to a "child of the turf" tell-

ing of the life of Erin's people and the part peat plays in it. Back to Omar's invasion of Egypt the reader goes, and then to take a peep at the art and methods of the late Augustin Daly and to see a magnificent portfolio of pictures of Daly productions, Daly actors and Daly himself. From Daly, the reader goes to Cuba and thrills with interest at the well-told adventures of a young man who carried mail and military documents to Gomez by the "Underground" route. And to add to all this there are four short stories, all excellent, and the longest is by that prince of tale-makers, Frank R. Stockton.

The August number of *Self Culture* continues to show the rapid strides made by that unique magazine. The half-tone pictures are superb, and they illustrate such interesting subjects as "Quebec, the Gibraltar of America;" "The Birth of the American Flag;" "A Decade of Institutional Development in Philadelphia;" "Papal Possibilities;" and "Andreas Hofer, the Tyrolean Patriot." The portraits in "Papal Possibilities" are from photographs by the official photographer at the Vatican. The thrilling story of Andreas Hofer presents reproductions of the celebrated paintings by Franz Defregger, which illustrate the scenes of the patriot's stormy career. An instructive article by Mr. Edwin Burritt Smith sets forth the legal status of Trusts, and outlines the ancient English and modern American legislation directed against monopolies. Mr. Leon Mead advances an able plea for a National School of Diplomacy, to be an adjunct of the National University at Washington. An illustration of French justice [?], somewhat parallel to the Dreyfus case, is described in "The Famous Lyons Mail Case," an article in which the basic facts of the great play of that name are set forth. Lovers of Browning will find an admirable criticism of "The Return of the Druses" in this number, the work being judged from the dramatic standpoint. In an article entitled "Missions and Social Evolution" (an illustrated review of Dr. Dennis's "Christian Missions and Social Progress"), the extraordinary work accomplished by missionary

labor in the East is pointed out. In the Editorial Comment are given a brief sketch of England's quarrel with the Transvaal, and notices of the world's doings in various countries,—France, Holland, Belgium, Spain, Australia, Samoa, Jamaica, and the Philippines. The Women's Department has plenty of gossip paragraphs, and Mrs. Laura Hull-Morris discusses the question "Is Music Intellectual?" Book reviews, educational papers, and interesting matter for the young, occupy their usual places; while a bright article on "Sea Etiquette" brings the Contents to a close.

AUGUST LADIES' HOME JOURNAL.—

Hamlin Garland, Anthony Hope, John Kendrick Bangs, Harold Richard Vynne, Anna Robeson Brown, "Josiah Allen's Wife," Clara Morris, Kate Whiting Patch and Anna Farquhar are among the half-score of writers of fiction who contribute stories to the August *Ladies' Home Journal*. The Midsummer Fiction Number of the *Journal* is in many respects a notable magazine. It has brought together in a single issue some of the most popular story-writers, and the most capable black-and-white artists to illustrate their work. Fiction, of course, predominates, but there is an abundance of timely, practical articles especially appealing to home and family interests and tending to lighten and brighten women's work.

The Rev. Newell Dwight Hillis, D. D., has an interesting article in this issue on "The Diffusion of Happiness Through Conversation," the third of his "Secrets of a Happy Life" series, and Mrs. Burton Kingsland and Emily D. Striebert write of "With the Children on Sunday"—their diversions and instruction; "What Can be Done With an Old Farmhouse" pictures how an old building can be artistically remodeled at small cost. On two other pictorial pages are shown the most cosy and attractive "Houses in Woods, Valleys and Mountains," and "The Sweetest of Summer Charities" pictures the work of the flower missions in several cities. The latest feminine fancies in dress are set forth in "The Gossip of a New York Girl," and Emily

Wight writes of the "Newest Styles in Hair Dressing" and "Laces for Dress Trimmings." Mrs. S. T. Rorer's cooking lesson is on "Cold Dishes for Hot Weather," and Mr. and Mrs. Edward B. Warman's health talks are on timely themes. For the boys Dan Beard explains how to make "A Back-Yard Fish Pond." The editorial departments are more interesting than usual, and touch upon every phase of home life. By The Curtis Publishing Company, Philadelphia. One dollar per year; ten cents per copy.

LIPPINCOTT'S MAGAZINE FOR AUGUST, 1899.—"Fortune's Vassals," by Sarah Barnwell Elliott, the complete novel in *Lippincott's New Magazine* for August, is undoubtedly the strongest novel to date from a pen which has already produced "The Durket Sperrit" and "An Incident and Other Happenings." In conception it is original, and in execution it is romantic and realistic. The life is that of to-day in a small American town anywhere you please. The controlling motives are the old—yet ever new—ones of our common nature.

The fiction of the month, in all respects striking, is rendered unique by the addition of "Noah's Ark," in which I. Zangwill, in his masterly way, takes his reader from the Ghetto of Frankfort, Germany, to distant Niagara Falls. This is one of the few tales by its author which will appeal in a peculiar manner to Americans.

Dr. C. W. Doyle, author of "The Taming of the Jungle," contributes a picturesque story in a field all his own, namely that of the Chinese quarter of San Francisco. A mother's tragic attempts to bring sunlight into the darkness of her "Bibi's" eyes makes a lasting impression on the reader.

A strong and timely paper, by Maurice Thompson, entitled "The Court of Judge Lynch;" Mrs. Ellen Olney Kirk's admirable article, the second in the series of articles On Women, by Women, for Women, entitled, "Woman: A Phase of Modernity;" Miss Anne Hollingsworth Wharton's second paper on "The Salon in Old Philadelphia;" "The

Devil's Bridge," a seasonable legend of the Philippines, by Charles M. Skinner, and "Wireless Telegraphy," by George F. Barker, LL. D., are all of interest at the moment.

A remarkable poem from the far West, called "Two Must be Two," by Madge Morris, and "Our Islands," Hattie Whitney, complete a midsummer number which gives character to the new career of *Lippincott's*.

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Correspondence.

INCREASED RANK SURGEON GENERAL U. S. A.

Editor New England Medical Monthly:

We have the honor to transmit herewith, through you, to the American Medical Association, a copy of the resolutions unanimously adopted by the Medical Association of Georgia at its Fiftieth Annual Session, convened in Macon, Ga., on the 19th to 21st of April, 1899, touching the matter of according increased rank to the Surgeon General of the Army, by raising the office from the grade of a Brigadier to that of a Major General, and at the same time the undersigned, by resolution also, were constituted a committee to communicate our Association's action to all medical bodies in the United States, and ask their co-operation, active and earnest in this effort, inaugurated to elevate the position of Surgeon General of the Army to a rank more commensurate with the profound learning varied experience and high order of administrative talent required in one assuming the grave responsibilities of the position, to ensure the successful discharge of the duties thereunto appertaining.

Members of our profession who are likely to be called to the Surgeon General's office must make a sacrifice in income in excess of that to be derived from the position, though it be raised to the rank of Major General with its pay and allowances, and for the dignity of our profession, as well as the sacrifice that must be made by each incumbent, our Association was unanimous in the opinion that the position should be made one of the most important in the Army, as

it is second to none in the vast and varied responsibilities it imposes.

We sincerely trust, therefore, that our Association may be able to enlist the American Medical Association in this matter by the adoption of some similar form of action, and have its earnest and active co-operation in the effort to induce Congress to appreciate the justice and extreme propriety of this effort, by placing your body in communication with as many Senators and Representatives in Congress as it can approach upon this subject before the meeting of Congress in December next, or as soon as it may be practicable.

We are firmly of the opinion that the earnest submission of this matter to Congress by the solid front of the medical profession of the United States will certainly accomplish the end sought of advancing the position of Surgeon General to a rank more commensurate with the responsibilities and obligations of the high trust. We are, Dear Sir,

Very truly yours,

J. Lawton Hiers, M. D.

WHEREAS, The position of the Surgeon General of the United States Army involves great and grave responsibility, the direction of vast interest, the highest order of professional skill and learning and executive ability, and

WHEREAS, The number of officers and soldiers under the direction of the Surgeon General in an Army organized as is the Army of the United States, is greater than the command of a division commander,

Be it Resolved, By the Medical Association of Georgia that it is the sense of this body that the Surgeon General of the Army should have the rank, pay and allowances of a Major General.

Resolved, That the Medical Association of Georgia requests all the Medical Societies of the United States to join in this appeal.

Resolved, By the Medical Association of Georgia, that copies of these resolutions be transmitted to the President of the United States, the Honorable Secretary of War and our Senators and Representatives in Congress, with the request that all co-operate in attaining the end sought; and further that copies be also sent

to the American Medical Association and all other medical societies in the United States, with the request that they join in this memorial to Congress and urge prompt action upon this subject by our National legislative authorities.

I certify that the above is a correct copy of the resolutions adopted by the Medical Association of Georgia, in its fiftieth annual session, held at Macon, Ga., April 18 to 21, 1899.
(Signed) R. H. Taylor, M. D., Sec.

United States Treasury and other public buildings.

It is earnestly hoped that every fellow, Active, Honorary and Associate, will be present at this meeting, as we want to make it rank among the notable meetings of this Association.

Very Sincerely,
D. Percy Hickling, M. D.

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Abstracts.

MEETING OF THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

Editor New England Medical Monthly:

The American Electro-Therapeutic Association will hold its ninth annual meeting at Washington, D. C., September 19, 20, 21, 1890. The President, F. B. Bishop, M. D., appointed the following Committee of Arrangements:

Drs. D. Percy Hickling, Chairman, Jos. Taber Johnson, G. Lloyd Magruder, Z. T. Sowers, Robert Reyburn, G. Betton Massey, Chas. R. Luce, Elmer Sothoron, Llewellyn Eliot, Clifton Mayfield.

Willard's Hotel has been chosen for the headquarters and special rates have been made for all interested in this meeting.

Many able papers have been promised and a very successful scientific meeting is assured. There will be a large and varied exhibition of Electro-Therapeutic apparatus in Willard's Hall during the meeting of the Association. Willard's Hall is well adapted for this purpose, as it not only adjoins the Headquarters but communicates with it by a corridor; there is also a large entrance directly from the street. The Committee also promises a very pleasant social program, including a reception by the President of the United States, an excursion to Mt. Vernon, Arlington and Alexandria—a buffet lunch to be served at Alexandria—an evening visit to the Congressional Library to be viewed under electrical illumination. Provisions have also been made to visit the War, State and Navy Departments, the

STANDARDIZATION NEEDED.—The revision of the "United States Pharmacopœia," which is to be done next year, is a matter of sufficient importance to receive the serious consideration of the profession. The physician is the one who has the greatest interest in the reliability and availability of the products of the pharmacist. They are part of the tools of his trade and on their efficiency his success to a greater or less extent depends. It is a well known fact that many of the crude drugs that form the basis of the pharmacopœial preparations are far from being as reliable as their proper medical usage demands. When such physiologically powerful drugs, for example, as colchicum, conium, hydrastis, hyoscyamus, and others may vary in their content of active principle 200 to 300 per cent. in different samples, as has been amply demonstrated by competent authorities, it would seem that something ought to be done to eliminate these fluctuations of the crude drug from the official preparations. If the latter are not uniform in medical potency, what confidence can be placed in them or in the pharmacopœia, which certainly ought to be a reliable guide for accurate dosage and medication?

It is true, the last edition of the pharmacopœia did provide standards for cinchona, opium and nux vomica, and the recently published "British Pharmacopœia" goes a step further and standardizes ipecac and belladonna, but the principle has not yet been made to cover calabar, coca, colchicum, conium, gelsemium, hydrastis, podophyllum, stramonium or veratrum, to say nothing of important drugs such as aconite, cannabis indica, digitalis, ergot and strophan-

thus, which defy any and every chemical test thus far elaborated, and which, to be assayed at all, must be tested pharmacologically on the living animal.

It is, perhaps, demanding too much to ask the revisers of the Pharmacopœia who are soon to enter on their decennial task, to provide standards for all powerful drugs, but it seems to be well within the bounds of the reasonable and moderate to urge the expediency of extending the principle of chemical standardization to all drugs susceptible of accurate chemical assay and also of adjustment, by chemical means, to uniform standards based on a fixed percentage of active principle or principles in the finished preparation. Surely, the physician has enough to perplex and baffle him in the idiosyncrasies of individual patients, and in the irremediable difficulties of diagnosis—may he not justly demand protection from the disaster which follows in the train of a weak, inert, unreliable drug product, or of a preparation possessing an unusual and dangerous potency? The golden mean between the worthless and toxic ought to characterize every fluid extract, solid extract or tincture administered in the treatment of disease.

The very general use of diphtheria antitoxin and the growing employment of an antitetanic serum for prophylactic purposes have acquainted the profession with the fact that the curative serums can be tested and standardized only by the physiologic method—by observing how much of the serum will preserve from sickness a test-animal into which is ejected simultaneously ten times the fatal dose of the respective toxin. This is indeed a tedious, laborious, expensive and not absolutely uniform means of pronouncing on the exact strength of a given serum, but it is the only means available; there is no other, as no chemist pretends that he can test a parcel of antitoxin with his reagents. Every word of this applies with almost equal force to the testing of a limited number of powerful and important drugs like ergot, digitalis, squill, convallaria majalis, cannabis indica and strophanthus. The chemical test for these drugs and their pharmaceutic preparations is very

unreliable, and unless they are tested by the pharmacologist, on the living animal, their administration is a lottery affording no guarantee of prompt reaction or final cure. This fact is notoriously the cause of that unfortunate desuetude into which ergot and cannabis indica have largely fallen. Lacking uniformity of action and failing often to yield the expected results, the pharmaceutic preparations of the market are wholly discarded by the disappointed practitioner. Professor Hare, in his "Therapeutics," ascribes the frequent failure of cannabis indica to the inferiority of the preparations encountered, and the worthlessness of much of the ergot on the market is beyond dispute. Witness also the report of Houghton,¹ who pharmacologically tested six samples "supposed to be pure strophanthin;" one sample was *ninety* times as strong as another, and the remaining four varied between these limits of one and ninety.

If drug preparations can be made uniform in strength by the comparatively simple and inexpensive means of chemical assay, well and good, otherwise the physician has a right to ask the wealthy and prosperous manufacturer to apply the physiologic test to preparations whose activity can be gauged in no other manner. *Journal of the American Medical Association.*

MEDICAL PROGRESS.—CLOSURE OF THE ABDOMINAL INCISION AFTER LAPAROTOMY AND THE TENDENCY TO HERNIA.—In the course of time, abdominal operators have reached a proficiency in technique and an assurance in the application of the details of asepsis that have made laparotomy a comparatively facile and safe procedure. There has, however, remained an objection not foreseen at first, but ever becoming more insistently prominent as the number of abdominal operations increased. Despite the most anxious care and most solicitous technique, ventral herniæ occur at the site of the abdominal incision, and often make life miserable for the patient. The frequency of the occurrence of her-

¹ Journal, Oct. 22, 1898.

nia has become one of the great sources of opprobrium to modern abdominal surgery, and it is not unusual to have patients who do not fear the result of the operation itself, hesitate to undergo it because of the fear of the subsequent hernia that they have learned to dread from the experience of friends or acquaintances.

The review of the recent results of post-operational hernia by John G. Clark, M. D., of Johns Hopkins Hospital, in a recent number of *Progressive Medicine** shows that a number of factors which have usually been considered as influencing the production of hernia really have no ætiological connection with it. For instance permitting the patients to get up after 17-18 days does not predispose to hernia, and keeping them in bed for longer periods does not prove a prophylactic against its occurrence. The wearing or failure to wear a bandage after operation does not affect the liability to hernia either favorably or unfavorably. Pregnancy following immediately or remotely after operation plays no part in the production of hernia, despite preconceived notions to the contrary.

It is evident, then, that the occurrence of ventral hernia after operation is mainly due to the method of closing the abdominal wound, despite all that has been said by certain gynecologists abroad as to the advantage to be derived in this matter from making the incision through the rectus muscle. Dr. Clark, from his experience at Johns Hopkins, as well as his records of the subject, decides in favor of the incision in the linea alba. Two things are necessary to lessen the tendency to hernia in closing the incision. First the fascia, *i. e.*, the aponeurosis of the recti muscles, must be carefully brought together so as to secure complete and firm continuous union along the line of section. The essential point in placing the sutures is to catch enough of the aponeurosis to firmly bring the borders of the fascia not only into complete coaptation, but also to

slightly elevate them into a median ridge. The coaptation of the fascia must be especially exact at the lower end of the incision when the liability to hernia is greater because the layers of fascia are fewer.

The second requisite for a firm cicatrix is to secure healing *per primam*, and this is best secured by leaving no dead spaces in which blood or lymph may collect to become infected, and by allowing no penetrating cutaneous stitches through which micro organisms may penetrate from the surface despite the most careful precautions. On the whole, this subject of the avoidance of hernia by a careful technique in the closure of the abdominal incision would seem to have reached a development that leaves very little to be desired, and it is evident that it is only in patients with especially relaxed tissues, or with natural tendencies to hernia, that the operator may feel exempt from responsibility in future cases of this annoying sequela.

THE INFLUENCE OF COITUS WITH WHITE MEN IN INDUCING STERILITY IN ABORIGINAL WOMEN.—Dr. Sarsfield Cassidy, of New South Wales (*Medical Council*), says that it is well known in that country and established beyond doubt that an aboriginal native woman of Australia will never bear children to an aboriginal man after she has once had offspring by a white man. It has been tried in vain to find an instance where the aboriginal woman, having returned to the black man's camp, though sound in mind and body and absolutely free from any disease whatever, and having lived there with black men whose power of reproduction was beyond dispute, did not nevertheless remain absolutely barren.

If, says Dr. Cassidy, the diseases of civilized life were communicated to the woman before her return to the gunyah of the black man, thereby placing her *hors de combat* in the work of reproduction, the problem might be easily susceptible of solution; but it has been proved, he says, over and over again that the woman being absolutely sound and the man entirely able, no results follow their union even under the most favorable

* *Progressive Medicine*. A Quarterly Digest of Advances, Discoveries and Improvement in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D. Volume II. June, 1899. Lea Brothers & Co., Philadelphia.

circumstances. Should she, however, return among white folks, she conceives with evident ease. The black man does not taboo her during her stay with him, but, on the contrary, on account of her mixing with the whites, he treats her with special friendship and ardent affection.

We may add that such is also the case on the west coast of Africa, where the black woman who has lived with a white man is especially favored by the native males.—*N. Y. Medical Journal*.

SUDDEN DEATH IN INFANTS: "ASTHMA THYMICUM" (?).—Lange (*Centralbl. f. Gynak.*), speaking at Leipzig of a case of sudden death where the thymus was found enlarged, raised a discussion on the whole subject. Kroenig was of opinion that rapid death of an infant should always be attributed to sepsis. It is in newborn infants that the purest examples of "bacteriæmia" are to be found, not a trace of disease being visible at the necropsy, even at the umbilical wound, when the blood is full of colonies of streptococci. Lange's patient died suddenly at 3½ months; it had been treated for gonorrheal ophthalmia in an out-patient department, and had been weighed every week. It was not under weight, and it died suddenly, early in the morning, without any symptoms of acute or subacute mischief in the respiratory tract. The trachea, just one inch above the bifurcation, was contracted so that its lumen, not absolutely effaced, was like the hollow in the sheath of a sword. This contraction was due to the thymus, which weighed over three-quarters of an ounce, measuring one inch in thickness, and closely embraced and compressed the trachea. Structural changes were detected in the tracheal tissues. Lange claims that this case is the first recorded in which purely mechanical and persistent compression of the trachea by the thymus was sufficient to kill. He showed the parts, and with them another instructive preparation of hyperplasia of the thymus without visible compression of the trachea, from an infant who had died suddenly from after-attacks of spasm of the glottis.

Zweifel had his doubts about the cause of death in Lange's first case, as the lumen of the trachea was entirely obstructed. Asthma thymicum might cause death, but there was great difference of opinion concerning that disease.—*British Medical Journal*.

AN INSTANCE OF APPARENT INFECTION WITH CUBAN FEVER BY A FLY BITE.—Dr. Frank Donaldson, assistant surgeon, First Volunteer Cavalry (*Medical News*), says that an instance of apparent transmission of the Cuban fever by infection by a fly bite occurred after the regiment was mustered out. A lady who was helping him nurse in the regimental hospital was taken a few days later with what proved to be a typical case of Cuban fever. He was absolutely at a loss to account for it. She had been perfectly well, had not been in a malarious district, and had spent the summer in the North. During several days while at Camp Wikoff they had had a terrible visitation of flies and the men in the hospital had complained that their bite frequently drew blood, and on several occasions this lady had called his attention to the fact that blood had followed the bite of one of the flies. She was at the time of writing in hospital and the disease was running a typical course.—*N. Y. Medical Journal*.

DETERMINATION OF THE SPECIFIC GRAVITY AND HÆMOGLOBIN OF THE BLOOD.—To avoid the errors and the inconvenience incident to the method of determining the sp. gr., and from that the percentage of hæmoglobin of the blood to wit: variation in sp. gr. of the two solutions heretofore used due to temperature, and the adherence of the blood drop to the sp. gr., cylinder, on the one hand; and the necessity for a comparatively large amount of blood and of liquids, and for carrying and consulting a table of hæmoglobin percentages, on the other, Dr. Krauss has devised a new method. He has constructed a volume pipette and graduated it in hæmoglobin percentages; he uses two fluids, one of sp. gr. 1.000 at 60° F., colored with gentian violet, the

other of sp. gr. 1.060 at 60° F., uncolored, which will float blood containing 110 per cent. hæmoglobin. The error due to changes of temperature is slight and can be disregarded. The pipette holds 5 cc. at the 110 per cent. mark. Measure 5 cc. of the colorless, heavy liquid into a test tube and float upon it a drop of blood. The pipette filled with the lighter, gentian violet liquid is then introduced to the bottom of the tube and allowed to slowly discharge its contents, which may be seen to rise and diffuse themselves in the colorless medium. The blood drop recedes from the surface, and when the proper sp. gr. has been reached, the percentage of hæmoglobin is read off on the pipette. The instrument has been tested and found accurate. Krauss, Wm. A simple method of estimating the sp. gr. and hæmoglobin percentage of the blood. Tr. M. Soc. Tenn., Nashville.—*The National Medical Review*.

NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.—Dr. James B. Bullitt (*North Carolina Medical Journal*), exhibited to the Louisville Surgical Society a contrivance for producing local anæsthesia by the use of carbonic-acid gas. He had been familiar for some time with the use of this gas in the manufacture of ice by the carbon anhydride system, and it occurred to him that the gas could be used very well for local anæsthesia. The apparatus decided upon for experimental purposes, which worked very well, consisted of a storage drum containing twenty pounds of the gas, which had been liquefied by very high pressure; probably twelve hundred pounds pressure at room temperature would be necessary to convert this gaseous matter into liquid form; and when the pressure is released expansion of the liquid caused it to return to the gaseous state.

Local anæsthetics were becoming more and more used, and this would be a very cheap method of producing local anæsthesia. The drum which he exhibited cost three dollars and a half, but could be bought for three dollars with proper arrangements. When exhausted the drum could be recharged. Attached to the outlet

of the drum was a small brass pipe at the end of which was arranged a hypodermic needle, and by turning the small top valve the gas was liberated, and, passing out through the small pipe and the hypodermic needle, it produced in a very few seconds a small cake of ice in the piece of cloth held in his hand. When turned on the hand it immediately produced a white spot like ethyl chloride. It was apparently a very harmless procedure. A smaller drum containing, say, two or three pounds of gas could be made for surgical use. One thing in favor of the carbonic-acid gas for local anæsthesia was its comparative cheapness as compared with ethyl chloride.—*N. Y. Medical Journal*.

THE TREATMENT OF BRONCHITIS.—Quincke (*Berliner klinische Wochenschrift*; *Gaillard's Medical Journal*), draws attention to the fact that in bronchitis, as in the case of collections of pus, the object of treatment is to facilitate the draining away of the exudation. This is, however, possible in bronchitis only to a limited extent. Cough, and especially the act of vomiting, assists to this end. The same object has been attempted by means of the elastic corset, respiratory exercises, etc. Often in the early morning the bronchitic brings up a large quantity of sputum by the help of more or less persistent coughing. Quincke recommends that at this time the patient should lie as flat as possible for a couple of hours, so as to assist the draining of the secretion into the large bronchi, and hence its expectoration. The patient becomes accustomed to the position, even though with some difficulty, and can expectorate by turning the head to one side. After a few days the foot of the bed may also be raised from eight to twelve inches. In suitable cases the author says that in from two to four weeks there is a considerable diminution in the sputum. This mode of treatment is adapted to cases of chronic bronchitis which have led to a cylindrical or sacculated bronchiectasis in the lower lobes of the lung. It is of no avail in cases of diffuse, and especially recent,

bronchitis, with general secretion, or in cases of abscess cavities communicating laterally or incompletely with the bronchi, or of cavities with irritating contents. It may be difficult to distinguish between these conditions in practice, and this mode of treatment may help in the diagnosis. The number of suitable cases is not large, but at times the results are remarkable.—*N. Y. Medical Journal.*

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Notes and Comments.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—With the near approach of the annual meeting of the American Electro-Therapeutic Association, to be held on September 19, 20 and 21, in the city of Washington, under the Presidency of F. B. Bishop, M. D., the local Committee of Arrangements is redoubling its efforts to make it a success. Many electrical manufacturers will be represented in the Exhibit Hall and information will be freely given. Papers have thus far been promised from Drs. R. G. Nunn, A. D. Rockwell, Margaret A. Cleaves, F. J. Leviseur, Walter White, Robert Reyburn, G. A. Corson, C. O. Files, J. H. Kellogg, John A. Licthy, W. W. Scheppegegrell, L. Howe, E. Wende, F. B. Bishop, Robert Newman, W. J. Herdman, G. B. Massey, and Profs. Bergonie, of Bordeaux; Apostoli and Dolbear, of Paris.

With such authors a successful meeting must result.

NEW HAMPSHIRE MEDICAL SOCIETY. The New Hampshire Medical Society held its One Hundred and Eighth Anniversary Meeting in Concord, May 25 and 26, 1899, and an unusually long program was presented. Nearly all of the papers were read and discussed, others were read by their titles and referred to the Committee on Publication. The attendance was large and the meeting proved interesting to the members and delegates.

The following officers were elected:

President, Charles R. Walker, M. D., Concord.

Vice President, William T. Smith, M. D., Hanover.

Treasurer, M. H. Felt, M. D., Hillsborough Bridge.

Secretary, Granville P. Conn, M. D., Concord.

Executive Committee, Drs. F. A. Stillings, Concord; George D. Towne, Manchester; W. T. Smith, Hanover; F. E. Kittredge, Nashua; Ira J. Prouty, Keene; A. C. Heffenger, Portsmouth; G. W. McGregor, Littleton.

Committee of Arrangements, Drs. D. Edward Sullivan, Concord; Arthur K. Day, Concord; Frank W. Grafton, Concord; Sibley G. Morrill, Concord; G. H. Parker, Concord.

Anniversary Chairman, M. S. Woodman, M. D., West Lebanon.

A Council of twenty members and a Board of Censors, which includes the Board of Medical Examiners and of Registration for the State.

The next annual meeting of the Society will be held in Concord, May 31 and June 1, 1900.

TUBERCULOSIS OF THE BLADDER.—The male is more liable to the disease than the female, although the primary solitary tuberculosis vesical lesion is probably more frequent in women. An important lesion noted in connection with tuberculosis of the bladder in whatever form it occurs, most marked, however, in the chronic form, is contraction and induration of the muscular wall. The diminution of the size of the cavity is often extraordinary. It will be an exceptional case indeed in which the bladder will retain as much as two ounces. So far as we are aware, no explanation has been offered for this phenomenon.—Dr. W. M. L. Coplin.

The two remedies which are most valued as anti-tuberculous are guaiacol and creosote. I have frequently found much benefit derived from the use of guaiacol, beginning with three-drop doses, to be gradually increased to twenty drops, three times daily; to be continued without intermission over a long period of time. The principal urinary antiseptics which are indicated when the urine contains a large quantity of pus are salol, resorcin, beta-naphthol, betol, naphthalin, salicylic acid, boric acid, eucalyptus, ammonium benzoate, and

methylene blue. I frequently employ with benefit the following combination:

℞ Codeinæ sulph., gr. 5.
Salol, gr. 100.

M. ft. capsulæ No. 20. Sig. One after meals.

Of late I have given methylene blue, in two-grain doses, in cases of pyuria, and find that it exerts a marked antiseptic effect. Benzoate of ammonium enjoys a great popularity for the relief of alkaline fermentation, but I have derived very little benefit from its employment. The best remedy for preventing bacterial decomposition of the urea, and thus rendering the urine alkaline, is one which has recently been brought to the notice of the profession by Dr. Arthur Nicolaier, of Göttingen: urotropin, which should be given in five grain doses in capsules four times daily. One advantage of this remedy is that it can be employed without fear in cases in which there is interstitial nephritis. A combination from which I have often obtained good results is one composed of:

℞ Codeinæ hydrochlor.,
Ext. cannab. ind., aa gr. 5.
Guaiacol carb., gr. 100.

M. ft. capsulæ No. 20. Sig. One after meals.

Local treatment, such as injections and solutions, has not proven so beneficial to my mind as I had hoped. I have seen improvement follow instillation by means of a sterilized Keyes-Ultzmann syringe, a remedy suggested by Collin, who advises a twenty-per-cent. solution of the carbonate of guaiacol in sterilized olive oil, one or two grams being injected twice daily. The local use of iodoform in this condition has not been, as a rule, satisfactory, but I am certain that I have seen improvement follow the daily instillation of thirty minims of the following solution:

℞ Gum tragacanth, gr. 40.
Iodoform (sterilized), gr. 360.
Spir. vini rect., ℥ 80.
Aq. dest., fl. 3 8.

When the urine is loaded with pus and detritus much benefit is to be derived from irrigating the bladder twice daily with either a hot decinormal salt solution, a saturated solution of boric acid, or a teaspoonful of the salicylate of sodium in a pint of distilled water. For this purpose an instrument should not be introduced into the urethra or bladder, but the viscus should be filled after

the method suggested by Valentine *i. e.*, by hydrostatic pressure.—*Horwitz, Journal of Cutaneous and Genito-Urinary Diseases.*

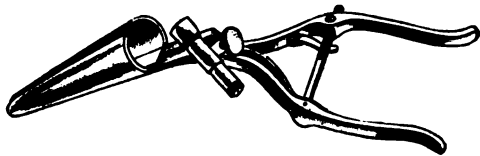
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Therapeutic Notes.

The Dow Portable Electric Assistant Co., have just perfected a new attachment, by which the electric light, that is supplied with all their assistants, can be applied to any speculum, either vaginal or rectal. Every physician will appreciate the value of a good light for this work, in fact light is an absolute necessity. The light is so arranged that it throws the light in such a way, that the use of instruments is not interfered with and the



whole cavity under examination is illuminated. The attachment can be applied or taken off in a second, and does not in any way interfere with the working of the speculum, if the doctor at any time wishes to use or clean it without the light. With the use of their electric light, examinations can be made in a dark room as well as in the daylight, and one very important feature about their light is that it is absolutely safe. No danger from short circuit, as in street current apparatus, and the light develops no



perceptible amount of heat. The light can be submerged in water or an antiseptic solution without injury.

The usefulness of this speculum attachment is certainly demonstrated by the letters which the Company is constantly receiving and the sales that have been made. Their new illustrated catalogue will explain everything and will be sent to any physician upon application to the office of the Company, 218 Tremont St., Boston, Mass. When writing please mention the NEW ENGLAND MEDICAL MONTHLY.

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Original Communications.

ON THE THERAPEUTIC USE OF THE COLLOIDAL METALS.

BY ARTHUR SCHLOSSMANN, M. D.,
Tutor at the University of Leipzig.

THE explanations of Dr. Lottermoser, published in the March number of the *Monatshefte*, in regard to the chemical properties of the colloidal metals have at once raised great hopes as to the therapeutic results to be obtained from them. The preparation of silver, a metal never before usable in the pure state, in a soluble form most favorable for absorption, and of metallic mercury, so long employed; in a colloidal modification, seemed to offer possibilities of a most exact dosage and a very ready absorption. In the case of the colloidal silver, the preparation was entirely new, and enables us to employ the medicinal properties of the metal itself. The salts only had been previously used; and these have very different actions in accordance with their acid constituents.

Dr. Schlossmann then proceeds to review the published experiences with the new drugs, more especially those of Credé, Weidmann, G. Schirmer, Wolf from, Werler, and Klien with colloidal silver. The literature of colloidal mercury is as yet scanty, and the author can refer only to the results obtained by Werler and Hopf.

For more than a year the author had been conducting a series of physiological and bacteriological experiments with colloidal silver (collargolum) and he finds that it is entirely and positively so in therapeutic doses, non-poisonous. Injected subcutaneously, administered per os or per in-

unctionem, or applied intraperitoneally, to the extent of 1:360 of the body weight, he never saw any toxic symptoms. Mixed with milk containing a little sugar, the one per cent. solution of the drug is readily taken by children. A one per cent. solution in albuminized water had absolutely no effect upon either the healthy or the inflamed mucous membrane. Instillation into the eye caused no sensation either in the author himself, his colleagues, or other persons experimented upon. Its application to other mucosæ was equally non-irritating.

From a bacteriological point of view, the solution of colloidal silver was found to be extremely efficacious; more so than the sublimate. This was especially noticeable with the pyogenic cocci, the diphtheria bacilli and the organisms belonging to the coli group. The addition of $\frac{1}{2}$ to 1:10 ccm. ($2\frac{1}{2}$ drachms) of a one per cent. solution to the agar plates hindered all growth. Strewn in substance upon the surface of the plates, large sterile rings were always formed around it. The researches of Thiele and Wolf (*Archiv. für Hygiene*, 1898) on the bactericide action of the metals, show the significance of these results.

If, after opening the peritoneal cavity of guinea-pigs and rabbits, pus organisms, staphylococci and streptococci, or diphtheria bacilli are introduced, and also a few pieces of silver in substance, the animals remain well, or at most are very slightly affected; whilst the control animals die. One year ago, Dr. Schlossmann exhibited in the same society in which the paper was read, a rabbit that had been thus treated with diphtheria culture and silver.

Bacteriological experience with colloidal mercury (hyrgolum) is more

scanty; yet it seems certain to the author that it by no means equals the silver preparation in antiseptic value. The mode in which solution is effected seems to be of importance. Solutions made with the help of albumin are less active than such as are made with water alone.

For therapeutic purposes the author employed the colloidal silver as a salve in the form of the unguentum Credé, and in one per cent. albumin solution externally, internally, and subcutaneously.

With the unguentum Credé he treated phlegmons, pemphigus neonatorum, post-vaccinal glandular swellings, scarlatina and diphtheria; in all eighteen cases. In phlegmon he believes that he has seen good results in some cases; but in others the progress of the disease seemed uninfluenced. The influence of the ointment in the glandular swellings of the acute infectious diseases was more marked; quite regularly there was a marked decrease in the size of the tumor, and many glands in which his former experience would have led him to expect suppuration, underwent spontaneous involution. And if his experiences in the more purely surgical affections were not so brilliant as some of the reports in the literature would have led him to expect, he thinks that it may have been dependent upon the technique of the inunctions, which plays an important part in the results obtained. Credé states that two-thirds of the inuncted silver reaches the tissue fluids; yet this must naturally vary in the different cases. Subcutaneous exhibition permits of more exact dosage; but subcutaneously he only employed the colloidal silver in a few cases of deep-seated glandular swellings. Apparently the injections were as good as painless, and the results were satisfactory. Only in one case did subsequent abscess formation occur.

The author's most extensive experiences were in the use of the colloidal silver in acute conjunctivitis, above all in gonorrhoeal ophthalmia. One to five per cent. albuminous solutions were employed, being applied to the conjunctiva by means of a camel's hair brush. The results were very excellent in all cases, and he places the drug at the head of all

the remedies at our disposal for the treatment of this often so obstinate affection. The instillations were entirely painless. Improvement began with the first application, and not infrequently the children were discharged cured after four or five days.

Schlossmann employed a similar solution for instillation into the ear, but was not satisfied with the results in suppurative otitis media. This may have been mainly due to the difficulty in applying the curative solution to the affected area. On the other hand, he found the preparation of unequalled value in the treatment of colicystitis. He irrigated the bladder thoroughly with lukewarm water and then injected 100 ccm. ($3\frac{1}{3}$ ounces) of the one per cent. albuminous solution. Its effect was instantly visible; in every case the temperature fell, the general condition improved, and the urine rapidly became sterile again.

Schlossmann also employed colloidal silver internally in acute intestinal catarrhs of infectious origin. A teaspoonful of the one per cent. albuminous solution was administered with a little milk or syrup every hour or two, the children taking it willingly. It is possible that the improvement may have been partly due to the simultaneous regulation of the diet. But the author recommends the colloidal silver to all practitioners who treat these infectious intestinal affections with intestinal antiseptics, as worthy of a place in the very first ranks of the drugs available for that purpose. Besides its great antiseptic power it has the advantage of being absolutely non-poisonous.

With colloidal mercury (hyrgolum) the author treated seven cases of infantile lues, six congenital, and one acquired at the age of a year and a quarter. He used inunctions of a ten per cent. ointment made with cold cream; this can be readily inuncted into the skin. In all cases the syphilitic symptoms rapidly retrogressed; in no case did there occur symptoms of intoxication. He found that two grams (30 grains) per inunction was a sufficient quantity. It was very noticeable that the general condition of the children was in no way affected by this mercurial treat-

ment. Under grey ointment the childrens' weight curve regularly remained stationary or sank; under the colloidal mercury ointment the exact opposite took place. All the nurslings increased in weight whilst under treatment; one of them in fact gained rapidly, to the extent of 200 to 250 grams ($6\frac{2}{3}$ to $8\frac{2}{3}$ ounces) per week. In one case the author was able to demonstrate the admirable absorption of the mercury in this colloidal form. The patient was inuncted every second day with two grams (30 grains) of the ointment. On the second day demonstrable quantities of mercury were found in the urine. This was by qualitative test only. On the fourth day, in 850 ccm. (28 ounces) of urine collected in the meantime, there was 0.0116 gram ($\frac{1}{4}$ grain) of mercury; in 750 ccm. (25 ounces) on the sixth day, there was 0.0109 grams (about $\frac{1}{4}$ grain). In another case the presence of a much smaller quantity only was demonstrated.

In conclusion, the author states his conviction that silver in its colloidal state is an excellent, non-irritant and non-poisonous antiseptic, that deserves to be tried not only in surgery, but also in all the various fields of internal medicine. No other remedy so quickly and thoroughly cures the infectious diseases of the mucous membranes, above all, the blenorrhoeal ophthalmia of the new born and colicystitis. Colloidal mercury, on account of its minimum toxicity, ready absorbability and prompt action, is also deserving of general attention.

In a note the author states his belief that simple solutions of the pure metals should not be employed, but that albumin to the amount of the beaten white of one egg to 200 ccm. ($6\frac{2}{3}$ ounces) of the solution should always be added, even when the drugs are employed as ointments.

A TRIP TO HOT SPRINGS, VIRGINIA.

BY W. C. WILE, A. M., M. D., LL. D.,
DANBURY, CONN.

RECOVERING from an attack of pneumonia, during which an explosion of gout in both ankles took place, the writer, helpless, wended his way to the Hot Springs, Virginia, that celebrated resort, to take the cure, and I thought it was just possible that the result of that visit, together with some description of the place, the treatment in vogue there, and the outcome of my case, might prove interesting to the readers of the NEW ENGLAND MEDICAL MONTHLY.

These Springs are delightfully located in the Hot Springs Valley of Virginia, on the Chesapeake & Ohio Railway, at an elevation of 2,500 feet. Environed by mountains rising 4,000 feet above the sea, they offer a charming retreat, with the natural conditions so necessary for the comfort of invalids.

An exceptional and striking feature of the climate is the dryness of the atmosphere. The uniformity of temperature is a splendid adjunct to the health-giving waters and form one of the most important of the natural conditions that unite to aid in the remarkable curative results that have been experienced. The surrounding mountains afford protection from sudden changes and insure a delightful temperature, free from extremes in summer and safe in the most severe winters, and official records show that the Hot Springs Valley is a favored spot.

The scenery is bold and picturesque. The visitor may drive for miles over roads everywhere attractive, which afford a succession of constantly changing mountain views not excelled by any scenery in the Alleghanies.

Winters, most dreaded by invalids, may be passed there under conditions of safety and comfort, while the summers afford pleasures and recreation insuring strength and renewed health. Owing to the elevation, 2,500 feet above sea level, the air is very light, thus giving the benefit of the direct rays of the sun, without the attendant heat of a heavier at-

VAGINISMUS AND VAGINITIS.—

B Ol. eucalypti, 3 iij.

Ceræ albæ,

Ol. theobromatis, aa ad 3 iij.

M. et div. in supposit. No. iv (bougie-shaped).—*Lutaud, Jour. de méd., Méd. Rec.*

mosphere, and insuring cool nights even in the warmest season.

The temperature of the waters is due to the internal heat of the globe which at this point has been brought near to the surface by the upheaval of the lower stratification, and that, in the almost vertical seams of the rock formation beneath the valley, the waters and gases under hydraulic conditions find ready passage to the surface from the mysterious heated regions below.

The abundant flow of these highly charged waters is not their least wonderful feature. A quarter of a million gallons of hot water flow daily from springs within the grounds, while a larger volume of

otherwise be inside rooms. The other, but just completed, is a four-story building, every room in which also commands a picturesque view.

A covered viaduct spans the intervening space between the combined buildings and the bath house and through this, guests may pass from any part of the hotel to the bathing rooms or to the Solarium without exposure to drafts or changes of temperature. Sedan or wheeled chairs are provided for the comfort of the guests, who may be conveyed therein directly to and from their rooms, by the aid of four elevators in the main buildings.

The rooms are large and bright, arranged single or en suite, with



natural warm water from other springs flows off through the valley. For three generations, the virtues of these springs have been tried by people from all parts of the United States and foreign countries.

The Homestead, the most complete structure of its character in the country, especially adapted to the wants of sojourners at Hot Springs, rests, castle-like, upon the summit of a hill, commanding a view of the park in which are located the springs which make this valley famous. It consists, primarily, of two complete buildings, one of which, erected two years ago, is built about a spacious turf court, affording sunlight and perfect ventilation to what would

electric lights, private bathrooms and fireplaces adapted to the burning of wood.

The most improved sanitary conditions prevail everywhere throughout the property. Arrangements for heating and ventilating insure pure, fresh air at all times, without drafts. The temperature of any room may be regulated as desired.

For those preferring more privacy than hotels afford, a dozen attractive cottages are located within the grounds. Here are maintained careful details of arrangement, looking to the comfort of guests.

The ordinary drinking water supply of the Hot Springs comes clear pure and crystal-like from a bold

spring that emerges from a sandstone formation on the mountain side far above the hotels and cottages.

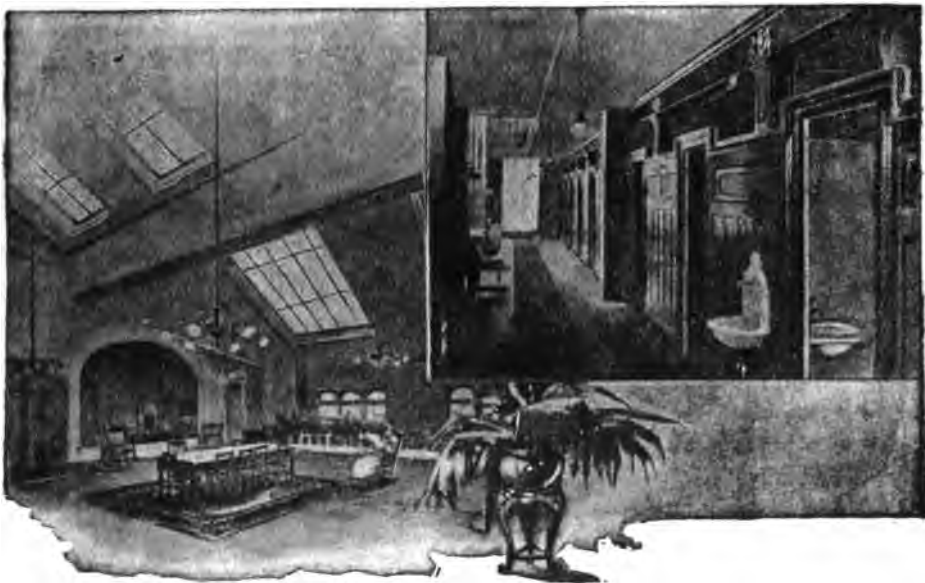
The sewerage and drainage of the hotels and cottages, bath house and entire property has been devised and constructed upon plans made by sanitary engineers of high standing, and is as perfect in every respect as science can suggest or money provide.

The bath house, a splendid structure, is appropriately built in the colonial style of architecture. Located just below the last of a series of six distinct, large, flowing hot springs, the waters are conducted by gravity to it and distributed, fresh from the ground, to the bathing

administered. Its peculiar virtue consists in the combination of the mechanical or massage effect with the results that are derived directly from the application of the hot mineral stream.

The waters are found to be especially efficacious in gout, rheumatism, rheumatic gout, nervous diseases, sciatica, neurasthenia, nervous prostration, dyspepsia of various forms, early stages of locomotor ataxia, old joint injuries, diseases of the liver and kidneys; also disorders peculiar to women.

Besides the hot springs, the effects of which, as drinking waters, are pronounced and helpful, there are magnesia, sulphur and soda-lithia



apartments on different floors, without loss of heat or its increase by artificial means and fully charged with all their gases and other pronounced and health-giving qualities. At none of the more celebrated places in Europe and at no other in America, is the temperature prescribed for hot baths that at which the water emerges from the earth in the natural springs. The arrangements here are perfect; the water first sees the light in the bath tub, or as it plays on the bather in the spout stream, fresh from subterranean depths.

The baths are of all known kinds and combinations; that known as the spout bath has, perhaps, produced the most wonderful and certain results by the manner in which it is

springs within the grounds and alum water from a spring near at hand. The water from the soda-lithia spring comes strong and clear from the ground and forms a beautiful stream, meandering through the lawns. It is a delicious table water, harmless and yet one of the most pronounced and beneficial mineral waters known. The temperature of the water at the spring is 74. It is a strong diuretic, recommended especially for diseases of the kidneys and bladder.

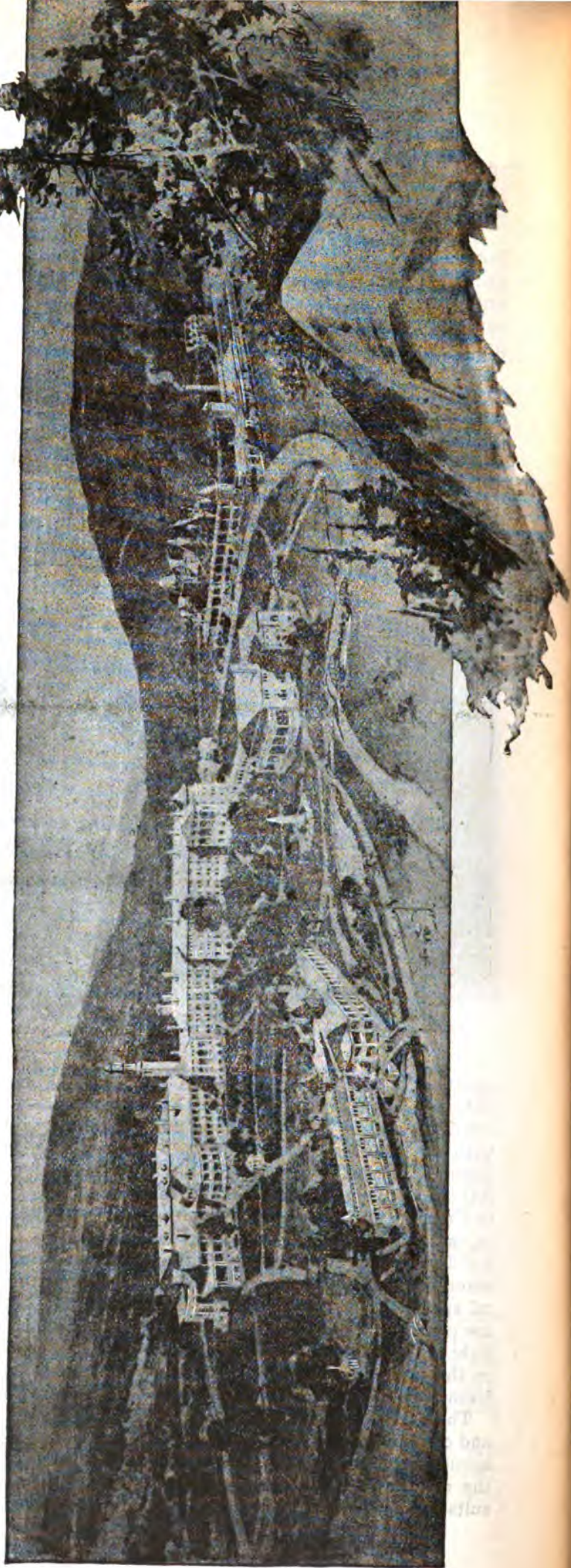
Magnesia spring supplies a drinking water which has long been a favorite. It sparkles with gas bubbles as it comes from the ground at a temperature of 100, and produces the results of a mild alterative, acting efficiently in giving tone to the

stomach and restoring action to the system.

There are also the lithia spring and other mineral drinking waters, within the grounds each having its special qualities.

Letters of introduction to Dr. Henry S. Pole gave me at once the services of a man who is wonderfully adapted by his delightful manners and deep learning to have charge of sick people. Dr. Pole, who is the successor of old Dr. Cabot, who first brought to the notice of the profession the value of these springs in the treatment of the various diseases above alluded to, has in the past thirty years treated 50,000 cases of gout and rheumatism, and his study of these diseases has developed a fund of information and a skill in their treatment, which I believe is possessed by no other man in the United States.

Previous to my going to the Hot Springs and before seeing Dr. Pole, my physicians had limited my diet to fish, eggs, cereals, oysters and clams, together with certain vegetables. On his first visit, Dr. Pole said that sort of diet was a mistake,



that he had come to the conclusion that many cases of gout were starved, too many articles of diet were prohibited which were really helpful, that to get the best results we must nourish the patient, give him good, hearty food and to my amazement he prescribed the following soups: Consomme, Julienne, tomato, mock turtle and puree were allowed. Bean and pea soups were prohibited.

All kinds of fish were allowed, except canned lobsters—fresh lobster there was no objection to.

Of meats, beef, mutton, lamb, chicken, turkey and game were allowed, but all pork was prohibited. The least objectionable form to the latter, however, being ham and bacon,

candy, *strawberries*, bananas, preserves, jellies, lemons with sugar.

Dried fruits may be taken, provided saccharin is used in the cooking. Saccharin must be used at all times in the place of sugar.

The fats—olive oil, gravy, sauces, mayonnaise and butter were allowed.

No fried meat of any kind allowed.

Alcoholics disallowed except in cases of debility, when whisky, preferably Scotch whiskey, was prescribed with carbonated water.

For drink, tea, milk with salt in it and coffee for breakfast only.

No water from one hour before to one hour after meals.

Fresh fruit allowed with the exceptions above indicated.



but the patient was better without any pork at all.

Of vegetables, spinach, green beans, onions, new peas, lettuce, carrots, parsnips, turnips, raw cabbage, cauliflower, string beans, rice, oatmeal, hominy.

Grits and mush were allowed, but cracked wheat or wheatina were not allowed.

Asparagus allowed unless it was found to irritate, some cases it agreed with, while some it did not. Radishes were not allowed on account of their indigestibility. Sugar beets not allowed. Tomatoes allowed if they agreed. Lemons were allowed, provided they were used without sugar. Eggs allowed. No sweets at all. Tabooed, sugar, pastry, pudding,

Bananas are considered very indigestible by him.

No hot bread allowed of any kind.

The directions were to live in the open air, taking all the exercise I possibly could.

This diet was a revelation to me, inasmuch as it contained many things which heretofore I had been instructed I must not under any circumstances use, but I rapidly improved from the first.

The only medicine administered during my stay of four weeks was thialion in teaspoonful doses every morning on rising, in a cup of hot water.

The claim that Dr. Pole makes is that gout is largely due to the fact that there is not proper digestion of

the food; that the water drunk with the meals sweeps the gastric juice into the circulation before it has had opportunity to perform its functions upon the foods eaten, the result being imperfect digestion, with retention in the system, of the uric acid, which



would be more freely eliminated if the digestive process were fully carried out.

I was directed to take tub baths at 104 degrees and remain in it 13 minutes, and then I was put in the pack for 13 minutes more; then a thorough



massage, winding up with an alcohol rub. This was continued for three days, one day's intermission. After six of these baths and a second day of intermission, I was ordered to alternate them with a spout bath. This bath had a temperature of 104, coming out from a $\frac{3}{4}$ -inch pipe,

striking the body at a pressure of 15 pounds to the square inch. The patient was made to move his body and remain in this bath for 13 minutes, constantly presenting different parts to the water in order that there might be a proper massage of all of the muscles. Of course, it is understood that this column of water was not allowed to hit the stomach. After the 13 minutes had expired the patient was put in pack the usual time with a hand massage and alcohol rub.

When I went there I could not walk. In two weeks I was able to walk about, and in four weeks I returned home fully convalescent, and a perfect restoration to health was made by a trip to Antwerp and back again on the same steamer.

The attention, tenderness, courtesy and kindness extended to me by everyone at the Springs, and by the Chesapeake & Ohio Railroad Co., was of the most cordial and delightful character, and I feel as if it was indeed my good fortune to fall into the hands of so distinguished a practitioner as Dr. Pole.

EUPHTHALMINE: A NEW MYDRIATIC.

(From the Laboratory of the University Ophthalmological Clinic of Marburg.)

BY B. TREUTLER, M. D.,

Clinical Assistant.

A NEW preparation, euphthalmine, was sent to the Marburg Ophthalmological Clinic by the "Chemische Fabrik auf Actien (formerly E. Schering)," of Berlin, with the request to examine into its properties and possible usefulness in ophthalmological work. At the suggestion of Professor C. Hess, I undertook the task of studying the action of the new remedy upon the human eye.

The preparation is the hydrochloric acid salt of the mandelic acid derivative of n-methyl-vinyldiacetonalkamine. Euphthalmine hydrochlorate, $C_{11}H_{15}NO_2 \cdot HCl$ is a white, crystalline powder readily soluble in cold water. It is closely related to the new anæsthetic, eucaïne "B," introduced by the same firm, bearing the same relation to it chemically

that homatropine does to tropacocaine; and it is claimed to have a powerful mydriatic effect.

Since our interest centered itself chiefly on its practical value, I did not go through the usual course of animal experimentation. I confined myself to examining the action of euphthalmine upon the pupil and accommodation in the human subject, more especially in comparison with the other and commonly used mydriatics, homatropine and cocaine. I employed it in the strengths of 2, 5 and 10 per cent.

The subjective sensations after the instillation of the 2 per cent. solution of euphthalmine were very slight; with the 5 and 10 per cent. solutions there was a very little burning, which disappeared in about a minute. This burning was less unpleasant than that occasioned by a 4 per cent. cocaine solution, and much less so than that caused by a 2 per cent. solution of eucaïne "A;" and none of my patients objected to a repetition of the instillation. The vascularization of the conjunctiva was not influenced by the drug.

The pupil remained unchanged for some ten or fifteen minutes after the application of the drug, and then underwent a fairly gradual dilatation which reached its height in 60 to 80 minutes. The dilatation in most cases was a maximum one (eight to nine mm. in diameter), and the pupil no longer reacted to light, convergent and consensual. In a very few cases there remained an extremely slight reaction to light under a binocular lens. Lessening of the mydriasis soon set in, and in four or five hours the pupil had regained its normal size and reactivity. Occasionally, but rarely, a very slight amount of dilatation remained twelve hours after the instillation. In old individuals the mydriasis set in somewhat more slowly and was not so great as in younger persons.

Accommodation was markedly influenced by the euphthalmine. Diminution therein was subjectively experienced in a few, some ten to fifteen minutes, and decreased about evenly with the pupillary dilatation. The maximum paresis remained at its height but a short time. In two to three hours the subjective diffi-

culties caused by the disturbance of accommodation disappeared.

As regards intensity of action, I found relatively little difference between the 2, 5 and 10 per cent. solutions. The two latter react somewhat more quickly upon the pupil and accommodation than do the former. For examination purposes, the 5 per cent. solution would seem to be the most suitable, at least in youthful and middle-aged patients; satisfactory dilatation can be obtained in 40 to 45 minutes. For older individuals the 10 per cent. solution was found better.

In order to compare the action of the new remedy with that of cocaine and homatropine, I instilled into one eye of a healthy subject a drop of a 10 per cent. euphthalmine solution, and into the other, some drops of a 4 per cent. cocaine solution. I found that in the cocaine eye mydriasis set in somewhat sooner, but was not nearly so complete as in the *euphthalminized* eye. In about twenty minutes, both pupils were equally large; but in about one hour, when the euphthalmine mydriasis was at its height, the cocaine pupil had already begun to contract. In the same way the accommodation paralysis occasioned by cocaine disappeared very much quicker than that caused by the euphthalmine. Clouding of the cornea, as occurs under the use of the stronger cocaine solutions, I have never observed with the new drug.

The properties of euphthalmine and homatropine are fairly similar; but comparison shows certain differences in the intensity and duration of their action. Two children aged respectively four and eight years each received two drops of a 2 per cent. euphthalmine solution in the right and two drops of a 1 per cent. homatropine solution in the left conjunctival sacs. Fifteen minutes later the left pupils were about two mm. larger than the right ones, which as yet were hardly influenced at all. From that time on, however, the pupils of both sides dilated at a fairly even rate, the left ones being always a little in advance of the right. The reaction to light was markedly diminished on both sides, and disappeared earlier in the left than in the

right eyes. After about 70 minutes, all the pupils were evenly dilated to their maximum extent (about nine mm.). Twenty-four hours later, the homatropinized pupil was still dilated, whilst the *euphthalminised* one was normal.

In a girl 20 years old, with hyperopic astigmatism and very narrow pupils, 5 per cent. euphthalmine was used in the right and 1 per cent. homatropine in the left eye. The reaction was much less intense and fully equal upon both sides. In 75 minutes both pupils had attained a diameter of about six mm. Then the euphthalmine mydriasis retrogressed, whilst the homatropinized pupil was still distinctly dilated next day.

A comparative experiment as regards accommodation was made upon Dr. Sommer, who had the kindness to place himself at my disposal for that purpose. Two drops each of a 10 per cent. euphthalmine and a 1 per cent. homatropine solution were employed. After 80 minutes, the paralysis of accommodation was far greater in the homatropinized than in the *euphthalminised* eye. Twenty minutes later it had begun to disappear in the latter, but remained at its height in the former. Four hours later the homatropinized eye still showed paresis and mydriasis, whilst the *euphthalminised* eye was perfectly normal.

The experiment showed conclusively that euphthalmine, though used in much stronger concentration, caused less paralysis of accommodation than homatropine; and that with it the paresis, with its unpleasant subjective difficulties, disappeared much more rapidly.

I found that a 2 per cent. solution of euphthalmine takes a somewhat longer time to effect a maximum dilatation of the pupil than a 1 per cent. solution of homatropine. A 5 and 10 per cent. solution of the new remedy, however, is fully equivalent to a 1 per cent. solution of homatropine, both in the time required for maximum pupillary dilatation and in the effect upon accommodation.

I may summarize my experimental results as follows:

1. The instillation of euphthalmine solutions into the eye causes

only very slight and temporary inconvenience.

2. Euphthalmine is a powerful mydriatic. A 5 to 10 per cent. solution produces a maximum dilatation of the pupil in about the same time as does a 1 per cent. homatropine solution.

3. Its action is less intense and prompt in the aged than it is in younger individuals.

4. Euphthalmine has the advantages over cocaine as a mydriatic that it is more powerful in its action and that it does not damage the corneal epithelium. On the other hand, the mydriasis that it occasions is somewhat slower of development.

5. Euphthalmine affects accommodation less than does homatropine.

6. Both the mydriasis and the accommodation paralysis disappear much more quickly after its use than after that of homatropine.

7. No unpleasant effects upon the organism have so far been observed from its use.

The new preparation thus appears to have several important advantages over the agents usually employed for the production of a temporary mydriasis, and invites extensive employment in ophthalmological practice.

NOTES, CHIEFLY CLINICAL, ON BRIGHT'S DISEASE AND ITS TREATMENT.

G. A. GILBERT, M. D.,
DANBURY, CONN.

IN PAST years, the strongest clinical evidence to the diagnostician of the existence of Bright's disease in any given case has been the presence of albumin in the urine, usually determined by heat or the nitric acid test. But, inasmuch as all simple proteids are precipitated from solution by an excess of nitric acid, and as all but traces of nitrogenous waste matter are eliminated through the kidneys, it might be well to use the more general term "proteids," in the place of the historical albumin. Chemically considered, albumin is a complex ureide containing one-fifth of its nitrogen in the form of urea. The presence of urea in the urine excites no apprehension, but on the

contrary, is considered normal, the adult human being eliminating about 30 grams daily as an expression of nitrogenous waste. In case of incomplete combustion, however, or faulty elimination of effete material, we have uric acid as a product; which, occurring as it does in the form of insoluble urates, is mostly retained in the circulating medium, serving as a source of irritation to both kidneys and liver, thus initiating the protean symptoms hitherto classed under the generic term "Uric Acid Diathesis;" while, in more advanced stages of mal-elimination, as in Bright's disease, much of the urea itself is retained in the circulation, giving rise to the well known symptom "Uræmia." In an article on this subject published in the *New York Medical Record*, Aug. 26, 1899, Walter Sands Mills, M. D., defines Bright's disease as "a disease characterized by degeneration of the kidneys, whereby the excretory function is so impaired that urea is not sufficiently eliminated by the blood." In other words, he considers, as does Semmola, that the changes in the kidneys are the result and not the cause of the disease. In the Goulstonian lectures delivered before the Royal College of Physicians, in March, 1898, (*Cf. London Lancet*, March and April, 1898,) John Rose Bradford, M. D., devoted some attention to the subject of uræmia, and, in summing up, says: "It is probably due to some abnormal product of disordered metabolism." Commenting on this statement, Dr. Mills continues: "The following facts comprise the sum total of our knowledge of the pathology of uræmia," to wit: "1. Before an outbreak of uræmia there is a diminution in the amount of urea excreted by the kidneys. 2. There is an increase in the percentage of urea in the blood."

It is becoming more evident from day to day, as the question receives scientific consideration, that the presence in the blood of uric acid and urea, and in the urine of uric acid and albumin indicates abnormal conditions that differ only in degree. There exist the same evidences of faulty metabolism; and, in both cases, owing to its having been forced to

attempt the work of other organs, the kidney is found to be incapable of performing its excretory function in a proper manner. In one case, this important organ indicates simply the incipient stage of inflammation; *i. e.*, high arterial tension and evidences of proliferation of connective tissue cells: in the other, the stage has become more advanced; *i. e.*, the inflammatory process has already begun and its products infiltrated into the interstitial tissue of the organ itself. It is evident, therefore, that the treatment should be directed toward relieving that organ of all impossible efforts; to accomplish which, the insoluble urates should be rendered soluble, while the entire alimentary tract should be urged to perform its duty, and perform it unusually well, the liver being stimulated to action and the bowels kept open and free from all extraneous and poisonous matter. Furthermore, albuminous foods, especially meats, should be largely interdicted, and a milk or vegetable diet substituted in most cases.

The medicinal treatment of Bright's disease has usually proved unsatisfactory from the fact that too little attention has been paid to its real cause. It is probably owing largely to their extreme fondness for red meats and high living that the English speaking people are so prone to this dread disease, while strict vegetarians, like the Chinese, are comparatively free from its ravages. (The variable climate is of course another factor.) It is obvious that by restricting the diet principally to the carbo-hydrates there will be less manufacture of uric acid, and necessarily less retention of its salts and urea in the circulation. In case, however, of the actual retention or presence in the blood of either of these toxines, it behooves us, as careful physicians, not only to recommend a fixed diet, but to prescribe a remedy which will readily form soluble urates, thus relieving the terrible strain upon the kidneys, and at the same time, a remedy hydragogue in action in order to stimulate the flow of bile and institute a free movement of the bowels. For this purpose the laxative salt of lithia, thi-

alium, has been found efficacious, having been used in several instances with unusually favorable results.

At a meeting of the Danbury Medical Society, Oct. 12, 1898, during the discussion which followed the reading of a paper by Geo. E. Lemmer, M. D., entitled "Uric Acid in the Blood: What Does it Lead to and How Can We Eliminate it?"* William C. Wile, M. D., presented a letter on this same subject written by Hamilton Kibbee, M. D., a distinguished physician of Oblong, Illinois, where in the latter said:

"I believe we are all wrong about the treatment of interstitial nephritis. I don't believe the albumin tests are of much value. The thing to keep the finger on is the test for urea, Doremus test the best. The excretion of urea is the barometer that indicates improvement or contrary. I think that excess of urea [in the circulation?] is the cause of the nephritis, and that the local trouble in the kidney is due to excessive uric acid in the blood. * * * Let us get rid of the urea; there can be no question but this is the first and most urgent requirement, while the second thing would be to stop the excessive accumulation of uric acid. That thialion will get rid of these toxins I have demonstrated."

Continuing his letter, Dr. Kibbee says:

"Fully expecting to be disappointed in the results, I ordered four ounces of thialion for use in my son's case. He is a young man twenty-three years of age, who was taken with albuminuria about seven months ago while at work in Chicago. For several weeks he was under the treatment of Dr. Purdy, the distinguished specialist and author of note on diseases of the kidney. By the advice of Dr. Purdy, I finally brought him home, where he has remained, improving in general health greatly by proper diet and rest. I have battled with this case with all a father's anxiety, and have grasped at everything which offered hope, but nothing has ever relieved the uremic symptoms like thialion. Its action has given me the greatest encouragement. His most troublesome

symptoms were flushing of the face, congestion of the eyes, pulsation of the temporal arteries and beating of the heart against the chest wall. There was great restlessness and sleeplessness, throwing himself over the bed and moaning. The urine was sometimes (usually) profuse, specific gravity 1010, and it contained always about one-fourth of one per cent. albumin. Urea, by Doremus test, was less than 500 grains in 24 hours. If he exercised it brought on pulsation with increased arterial tension and dizziness. I began the thialion about fifteen days ago and within three days I could see improvement. His flushed face has disappeared and his eyes are now normal. For the first few days he had pulsations, but they lasted only about half an hour and for the past three days he has had no pulsations whatever and he says he feels better than he has for a year. I cannot tell you how thankful and hopeful these results have made me, I tremble lest the benefit shall be only apparent and not real.

The boy was morose, despondent and hopeless, now he is his natural self again."

The above letter was written on the 9th of September, 1898; and one month and three days from that date the doctor writes again:

"My son has continued to improve up to Friday of last week, when he started to spend the winter with his brother, Kent V. Kibbee, M. D., Professor of Chemistry in the Medical Department of Fort Worth University, of Fort Worth, Texas. For two weeks previous to his departure he had no flush, headache or other symptoms connected with his kidney trouble and his urine in every respect was perfectly normal, even to excretion of urea. Though he suffered from a painful jaw, as the result of the extraction of an ulcerated tooth, he had no nervous symptoms, and insisted upon making the trip. He left here on Thursday and St. Louis on Friday morning, reaching Fort Worth on Saturday night. I had a letter from his brother, who visited us in October last, and he informs me that the boy got to Fort Worth in good order and that he is greatly surprised at the improve-

*Published in the NEW ENGLAND MEDICAL MONTHLY, November, 1898.

ment in his condition since he saw him last in October."

In commenting on this letter, Dr. Wile made the following remarks:

"Dr. Kibbee's words convey to us information which ought to prove valuable, certainly the results are remarkable. The trouble is that we have been growing more and more a gouty people, due to the fact, largely, that meat being cheap with us, we eat it in excess. The profession has long been looking for a reliable remedy to combat the multitude of ills directly traceable to an accumulation of uric acid in the blood, one which when ingested will convert the insoluble phosphates, oxalates and urates into a soluble compound which can be readily eliminated. This subject confronts the general practitioner daily as he goes his rounds. He has grasped at everything from pure waters down to dangerous drugs with but little avail, and I believe in thialion he has an invaluable agent for good."

The following case, reported by E. M. Smith, M. D., of Newtown, Conn., appeared in the *Journal of Science and Medicine*, May, 1899:

"Mrs. B., American, age 47, now passing menopause, is recovering from acute nephritis—urine scanty, high in specific gravity, exceedingly acid, liver torpid and inactive, bowels sluggish, torpid and inactive; a marked degree of mental hebetude.

This patient gave me considerable anxiety, inasmuch as I had given her almost all the diuretics with indifferent results—a little better now, not so well a little later.

I finally put her on thialion in teaspoonful doses thoroughly dissolved in a cupful of hot water each morning, insisting upon the dose being taken as soon after waking as possible, and to be drunk as hot as she could. It was but a few days before improvement began all along the line. There was a general amendment—urine increased in quantity, and nearly approached the neutral line, bowels acted in the most satisfactory manner. In this case the liver played an important part. This was stimulated until the stools became like that of the child. Mind cleared up, becoming very natural. She is now on the way to complete

recovery, though I still insist that she take thialion three or four times in succession every two weeks. In this case the different symptoms added to the mental condition made it doubtful whether she could ever recover, but I feel confident that this most happy result will take place."

A plan of treatment similar to the above was observed in the following case of "Chronic Interstitial Nephritis Accompanied with Melancholia," as reported by William B. Mann, M. D., of Evanston, Illinois, in the *NEW ENGLAND MEDICAL MONTHLY*, October, 1898:

"Mr. J., age 49, had for several years been a sufferer from asthma, headache, loss of appetite, constipation, fetid breath, copious discharges of offensive mucus from both nose and mouth, heavy dragging pains over the kidneys, puffiness of the feet and face, especially under the eyes, and insomnia. There were also frequent attacks of extreme melancholia, which were so depressing that the patient would have weeping spells, followed in a day or two by delusions of persecutions from an imaginary foe. He seemed at times on the verge of insanity. The pain in the region of the kidneys he described as constant and severe.

An examination of the urine revealed the fact that the quantity voided was below normal and contained a small quantity of albumin, hyaline casts, an excess of uric acid and the urates. He was badly emaciated and had a history of three years' illness. A more careful examination of the urine revealed the following: Quantity diminished to twenty ounces; specific gravity diminished; solids diminished; albumin present in considerable amount; urea diminished 50 per cent.; pus corpuscles and epithelium present; tube casts in small amount. Taking the case altogether it was one of the worst I was ever called upon to attend.

After ten days treatment with thialion, the urine became almost normal, both in quantity ($3\frac{1}{2}$ pints) and also chemically. I commenced a systematic course of diet, carefully avoiding that which would increase the irritability of the kidneys, at the same time building him up to the

fullest extent. I gave him a teaspoonful of thialion three times daily, dissolved in a glass of hot water, and the result was immediate and clearly apparent to physician and friends. It is unnecessary for me to state that his bowels, liver and stomach were thoroughly cleared out by this medicine. The acid eructations which had been so persistent rapidly passed away. After ten days treatment the patient said: 'You have done me more good in this short time than I have received heretofore in all my treatment by a number of physicians, some of whom stand very high in the profession.'

One of the remarkable features of this case was the fact that nothing else was used but thialion; that all the depressing symptoms passed away and of course the crying spells with them. Since this time the improvement has been steady, and though the case from start to finish has been an unpromising one, still I am satisfied a cure is certain."

A case somewhat like the above, and one that is of sufficient importance to be cited in this connection, has been treated by the writer recently in a similar manner, and with equally gratifying results, to wit:

Mrs. W., widow, American, age 60, appeared for treatment in August, 1898, bringing a sample of her urine and giving the following history:

Since her menopause, ten years ago, she had been gradually failing in general health. She first noticed attacks of vertigo, flushings of the face, irregular heart action and headaches. Her appetite became poor and she was obliged to refrain from eating meat, which had always been her main article of food, but which now, for some reason, "did not agree with her," causing "hot flashes," etc. Her ankles became swollen, and latterly she has complained of dropsy of the abdomen and some dyspnoea. She has spent sleepless nights and admits that she has become extremely nervous and feels at times like committing suicide. Her hearing and eyesight were both rapidly failing, and at times she saw "dark specks" floating in the air. Her strength was gone and she was unable to do her housework. During the past two years she had consulted four local

physicians and a New York specialist.

Physical examination revealed some tenderness on pressure over the region of the kidneys. There was extreme pallor of the skin and prominent dark rings under the eyes. When talking, the patient frequently wandered from the subject, seeming to be unable to concentrate her attention, though she was evidently an intelligent woman. The urine was scanty, rather high colored, and contained considerable albumin and some casts. Calcium oxalate crystals and the urates were also present in abundance, and there were the usual indications of a torpid liver. Obstinate constipation was admitted on questioning. The most striking features, however, to a general observer, in this case, would undoubtedly be the anæmia, weakness, and rambling conversation.

The patient was at once put upon thialion and a milk diet, the former being prescribed in half-teaspoonful doses in a teacupful of hot water three times daily until four ounces were taken and the urine had become markedly alkaline. The medicine was then omitted for two or three days, when it was again prescribed and taken in the same manner as before. At the end of the first month the urine had increased greatly in quantity, and indicated a loss of at least 50 per cent. of the albumin. The patient reported improvement in every respect, and expressed her gratitude in glowing terms for the speedy relief she had obtained. She soon afterward removed to New York, and the case was lost sight of until a few days ago, when her son, by request, visited the office and made the following statement:

"My mother, when she went away, had with her two bottles of the medicine, which she took according to your directions until it was all gone. She then felt so much better that she considered it unnecessary to take any more. She is now able to do her sewing and housework herself, and talks as lucidly and clearly as she ever did. Her urine was recently examined and only a trace of albumin was found. She is not nervous, sleeps well at night, eats well

of everything but meats, and looks as well in the face as she did before she was taken sick. She says she believes that the disease has been permanently checked, that she is likely to live for many years yet, and finally die of something else."

THE RHEUMATIC DIATHESIS.

BY ROY D. MOORE, M. D.,
ST. LOUIS, MO.

THERE is no more perplexing problem that confronts the physician in his routine work than the successful treatment of rheumatism, especially the chronic form. In the acute form of the disease there are three theories that predominate as to the causation of the trouble: First. The Metabolic theory. Secondly. The Neurotic theory. Thirdly. The Germ theory. Of these the metabolic theory holds most universal sway which attributes the disease to tissue changes, whereby an excess of sarco-lactic acid prevails in the blood. Upon this supposition the therapy of the disease with the alkaline remedies is based. Clinically there are two forms of rheumatism that concern us, namely: the acute and chronic. Acute rheumatic fever is a self limited disease, running its course in a certain time.

This self limitation has been demonstrated by Austin Flint, Sr., who, in Bellevue Hospital, years ago, treated a number of cases with inert substances and observed acute rheumatism would terminate in about three weeks. Such being the case, however, in no manner contra-indicates the use of remedies having well known therapeutic properties, as a patient who is kept persistently upon the alkaline treatment is far less liable to have serious complications arise during the course of the disease. Especially is this true regarding cardiac lesions. The salicylate of sodium in particular has obtained the widest use in the treatment of acute rheumatism given in ten or fifteen grain doses every three or four hours. Of other agents resorted to, the carbonate of potassium and the acetate of potassium are often prescribed with decided benefit. In this direction the bicarbonate of

sodium is also a valuable drug freely given until the urine becomes thoroughly alkaline in reaction. The usual outcome of a given case of acute rheumatism is highly satisfactory, but when we come to handling the chronic form of the disease there is perhaps no pathological condition that will more sorely tax our patience and act rebellious to all agents employed. There are, of course, reasons why such is the case. In the first place the blood becomes surcharged with uric acid, and as a result the so-called gouty deposits make their appearance in the joints in the shape of lime salts. These lime salts are productive of intense pain upon every movement of the involved joint, by their continued encroachment upon the adjacent structures the joint becomes greatly swollen, and the fingers or toes contorted in every possible shape, rendering life a continued burden to the sufferer. Everyone who has prescribed for this unfortunate class of patients is well aware of the inefficacy of many of the vaunted remedies for relief. The iodide of potassium has long been regarded as possessing merit in this direction, given in gradually increasing doses, but how many cases fall to our care that receive the least benefit from this agent? Indeed in a very large proportion of cases iodism comes upon the scene, and renders further use of the iodides impossible. In such cases the kidneys become involved in the systemic disturbance, and the evidence of morbus Brightii becomes apparent. Hot baths are indicated in these cases to produce a free diaphoresis, and under these circumstances I am in the habit of prescribing thialion in teaspoonful doses every four hours in a half glass of hot water; the benefits derived in chronic cases such as herein described from the use of thialion cannot possibly be equalled from any other preparation at present in use. In the first place thialion acts most favorably upon the liver, the organ seems to take on increased secretive action, the unpleasant gastric oppression becomes at once ameliorated, the eructation of food stops, and the tongue becomes gradually cleansed of its bilious coating. Simultaneously with the improve-

ment in this direction the alvine discharges become a golden color so characteristic of healthy stools, indicating the free admixture of the bile and the appetite craves for food. So far as the local effect of thialion on the swollen joints, the first improvement manifested in this direction is the relief of the intense pain; this generally follows about the second day. The patient then notices that there is a feeling as if the affected joint were becoming smaller, the skin becomes wrinkled, and a general improvement sets in most gratifying to all parties concerned in the case. I desire especially to call the attention to thialion on account of its remarkable therapeutic properties in chronic rheumatism: as is a well known fact, the profession of medicine is flooded with a long line of vaunted specifics, but by far the majority have been weighed in the balance and found wanting as to the results claimed; not so with thialion, however; under its influence it is truly surprising how an otherwise intractable treated case will improve under its continued use. Thialion is a laxative salt of lithia. It is prepared exclusively for physicians' use. Before dismissing this subject I desire to say that I have also found thialion a most valuable aid in the treatment of chronic malarial poisoning on account of its well marked stimulating influence upon the hepatic cells. In these cases it should be prescribed in teaspoonful doses in a teacupful of water, hot, one hour before each meal. This plan of treatment in no wise interferes with the administration of other agents; indeed the use of quinine will be productive of far better results while the patient is taking thialion than under any other circumstances. As we all know, many of these cases we think require a little mercurial cathartic, and yet we feel an uneasiness in the case of the aged to give even a small dose of calomel, or even blue mass. In such cases thialion will fully take the place of the mercurial, and has the advantage of being entirely free from every disagreeable property. The influence exerted upon the bilious state by thialion, stamps its efficacy at once as a reliable agent to use in a long line of dis-

eases dependent upon hepatic inactivity. In conclusion I desire to state that I have received such highly satisfactory returns from thialion, I cannot hesitate to express my views to my professional brethren, believing that others may have their attention called to something that will prove a friend in need.

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CURIOUS EFFECT OF A HEAD INJURY.
The *Boston Medical and Surgical Journal* records a case of unusual neurological interest which has been under treatment for some time past at St. Vincent's Hospital. Dr. T. H. Curtin states that the patient, William Larsen, a Norwegian, was admitted on September 5th in a state of coma, a block from a derrick on one of the piers having fallen upon his head and crushed in the right side of the skull, the fracture being nearly three inches across. Most of the third frontal convolution of the brain had been destroyed and it was not expected that the man could survive more than a few hours; but two days after the fragments of bone had been removed, the edges trimmed, and all pressure removed from the brain, he recovered consciousness. The effect of the injury upon memory and speech was watched with special interest, and it was at first found that while he seemed rational and nearly normal in his understanding of what was said to him, all his answers to questions were in an unintelligible gibberish. After a few days, however, the condition of the brain had so far improved that his speech became entirely coherent; but the remarkable circumstance was noted that he could no longer speak in his mother tongue, but only in English. Before his accident, it was ascertained, he could talk fluently in both Norwegian and English. Another feature of the case was the development of great emotional sensitiveness, so that if any one conversing with him smiled, he was moved to laughter, and if the person looked depressed, he began to weep. He recognized his acquaintances immediately, and talked with interest of his plans for the future.—*N. Y. Medical Journal*.

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William C. Wile, A. M., M. D., LL. D.,
Editor.

John J. Berry, M. D.,
Assistant Editor.

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Editorials.

OUR BIRTH-RATE.

THE RAPID decrease during the past ten years in the birth-rate of the United States has as yet attracted little or no attention, notwithstanding our rate is less than two more per 1000 than that which has aroused the world's sympathy for France, and which has compelled her to take extraordinary measures to prevent depopulation. The birth-rate in this country has now become less than 24 in every 1000 people, and, as is well-known, would be very much lower were it not for the fertility of the foreign element flocking to these shores, a fact that is especially significant. For what must be the inevitable result? "America for Americans" will become but a meaningless phrase. Three generations back, our ancestors raised families of from six to twelve children each, and would have thought it strange had it been otherwise. Now it is the fashion to leave the raising of children (the future citizens and rulers of this country) to our emigrant friends.

Three important factors, which, combined, have tended to cause this unfortunate condition in our sociological system, are—(1) The so-called "higher education" of woman and "woman's rights;" (2) The employment of girls in crowded factories; (3) Abortion. This last-named factor is one in which the physician should hold himself responsible and

fearlessly use his influence in preventing. Ten years ago, the estimated number of abortions was one in fourteen pregnancies; now, the best authorities agree that one out of every five pregnancies in this country ends in abortion, occurring mostly, of course, in the higher ranks of life where money will employ the requisite agency.

In reference to ovariectomy as a causative factor, one writer states that "careful investigations conducted in France show that since 1883 French surgeons have spayed more than 500,000 women," and no one can doubt that like investigation in America would show a similar gruesome record. Should 500,000 women be suddenly removed from a country by famine or pestilence, who would doubt its efficacy in decreasing the birth-rate?

THE ETIOLOGY OF CANCER.

ALTHOUGH pathologists and others have for a long time been occupied with this question, its solution is still a long way off.

There is still a strong tendency to adhere to the earlier theories and we note that Tillmann not only strongly endorses the views of Thiersch and Waldeyer, that carcinoma arises from glandular and superficial epithelium which pre-existed, but holds that the theory of its bacterial origin is wholly unproved and not worthy of consideration.

While the attempt to include this in the class of infectious diseases has not been wholly successful there are many facts which render such an attempt justifiable. There are many transmissible diseases whose specific germ has not yet been demonstrated and there is not a little clinical evidence in support of the theory of infection by contact. The increased prevalence of cancer is a somewhat suggestive fact. In thirty years, the number of deaths from this cause, per thousand, has almost trebled,

while in Great Britain the increase has been almost as well marked as in our own country. Roswell Park, M. D., who has given this subject much attention, asserts that no disease has moved with such great rapidity in past years as this, and predicts a great mortality from this cause, unless checked by some new and available means of prevention.

It is gratifying to observe that the state of New York has established and equipped a laboratory under the supervision of Dr. Park, and that careful and extensive investigations are now being made in the hope of demonstrating the parasitic origin of cancerous diseases.

URIC ACID AND LITHÆMIA.

THE GREAT interest that has been taken during the past ten years in the minute study of the secretions and excretions of the living organism has directed especial attention of late to uric acid and its effect upon the human body, the conclusion being reached by the majority of scientific investigators that it is a substance indicating a vice of nutrition and gives rise to various manifestations of the uric acid diathesis, not always sufficiently pronounced to be dignified by the name of rheumatism or gout, but which may be classed under the general term—"lithæmia," a name first employed by Murchison to designate a condition in which uric (lithic) acid is accumulated in excess in the blood and tissues and in which certain derangements occur in consequence.

Much ill-defined invalidism has long existed in the civilized world, which the physician has found himself unable to diagnose, but which he has thought necessary to name, and has called "malaria," "grip," "biliousness," etc., etc. It is now fast becoming the general opinion that this invalidism, which has been so obscure, is simply the result of injudicious or over-eating and conse-

quent faulty metabolism, causing the production of uric acid and thus giving rise to the symptoms denoting loss of nerve tone, high arterial tension, sleeplessness, headache, backache, etc., in other words, "lithæmia."

The announcement of the subject of the famous Jenk's Memorial Prize has just been made by the trustees, who have shown their customary good sense in the selection of a topic of immediate and absorbing interest to the profession; viz.—"The Various Manifestations of Lithæmia in Infancy and Childhood, with the Etiology and Treatment." As this prize is open for competition to the whole world, and usually calls out the best talent at home and abroad, it is to be expected that much new and valuable information will be brought out on this most important subject.

MALARIA AND MOSQUITOES.

WHILE THE discovery of the *plasmodium malaria* aided materially in clearing up etiological points, the *modus operandi* of this organism has been little understood.

Not long ago, Grassi, Ross and several Indian investigators advanced the theory that mosquitoes acted as distributing agents for this disease, and further observation goes far to strengthen this supposition. The fact that malaria cannot be acquired by the inhalation of a vitiated atmosphere or by the drinking of water, forces us to look elsewhere for sources of infection, so that just now the theory advanced seems a particularly plausible one. Thayer, of Baltimore, in a paper read before the Maryland Public Health Association, says:

"Mosquitoes invariably exist in malarious regions, and the malarial fevers are more prevalent at those periods when the mosquitoes are most abundant; they are especially numerous in the regions about swamps and marshes, where the dangers of infection are greatest. In

a malarious district there is greater danger of infection at about sundown and at night, but sunset and night are periods at which mosquitoes are highly active. The dangers of infection are greater near the ground than in elevated positions, but mosquitoes are more numerous near the ground. The danger of infection is greater on quiet nights than in windy weather, but wind is particularly unfavorable to the mosquito.

Emin Pasha was so convinced that the bite of the mosquito played an important part in the etiology of malarial fever in Africa, that he always travelled with a mosquito net, and escaped the disease. Bignami, further, has noted that in certain parts of Italy, workmen who live in conical huts with a hole at the top, through which the smoke of their little fire passes, are unusually free from the disease, while those about them may be almost universally affected. Of course, the presence of smoke is one of the surest protections against mosquitoes.

Koch, who last year devoted some months in Africa to the study of malaria, was strongly impressed with the probability of this hypothesis. He says: "The more I study this disease the more I incline toward the opinion that the latter (transference of the infection by means of the mosquito) is the main, probably the only, method. Wherever one goes, he finds tropical malaria and the mosquito present together. On the coast (in East Africa) there are several places which are free from the disease. One of these is the island of Chole, which lies upon the southern extremity of the island of Mafia. This is the only place on the coast where I could sleep without a mosquito net. In the mountains, malaria stops at exactly that point where no mosquitoes are to be found. Inland, malaria diminishes together with the mosquitoes. At those times of the year when there are many mosquitoes, malaria is more severe."

An attempt is now being made by Opie and MacCullom in the laboratory of the Johns Hopkins Hospital, to confirm the theory above advanced, and a few months will probably decide its value and importance.

THE MIDWIFE.

THE NEW Medical Bill of Illinois which went into force on July 1st, contains a provision regarding the practice of midwifery, which, though by no means ideal in character, seems to be a move in the right direction, and might be copied to advantage by the legislatures of certain New England states. The bill provides that after July 1st, no person shall practice midwifery in that state without first applying for and obtaining a license from the State Board of Health to do so; and that thereafter each candidate must pass an examination in midwifery, the fee for which shall be \$5.00, and \$3.00 for a certificate if granted.

The above will serve at least as some protection to the Illinoisians, provided the law be rigidly enforced, though of course it would be much better if the practice of midwifery were restricted entirely to the members of the profession.

A few years ago midwives were practically unknown except in the very largest cities; now they are springing up like mushrooms in every urban community, where they ply their trade without let or hindrance from city or state authority, notwithstanding they hold no license and have passed no examination. A prominent member of the Board of Selectmen, in a New England town of 20,000 inhabitants, recently made the statement that a certain midwife there signed and handed in every year more birth-certificates than any physician in the place.

The rapid influx of a vast foreign population especially Germans and Italians, has led to the practice of employing the so-called "midwife" in this country. She is usually some good-natured, but ignorant, German or Italian woman, who is called upon to attend her still more ignorant countrywoman. Her fee is small, which is a great inducement—and, having seen a few confinement cases,

she is supposed to "get along as well as the doctor," provided everything "goes well," otherwise *he* can be sent for afterwards. Such is the argument used in the majority of these cases, and many are the poor women suffering to-day for the want of scientific treatment at the time of their confinement.

It is time that our legislators were made acquainted with this fact, and followed the lead of Illinois in enacting some provision for the protection of the ignorant public. But evidently this will never be done until the physician earnestly agitates the question himself.

"IN THE EMPLOYMENT OF"
vs.
"WITH THE EMPLOYER OF."

THE *Therapeutic Gazette* for July, publishes an article by Dr. G. W. Spencer, of Philadelphia, on the "Dangers of Hydrogen Dioxide in Surgery," at the close of which appears the following somewhat remarkable statement; to wit: "In the vast majority of cases where peroxide of hydrogen is used and the condition seems aggravated, I am of opinion that the cause of the trouble lies in the employment of this agent."

Had the author of the above, instead of saying "in the employment of," substituted the phrase, "with the employer of," his "opinion" would doubtless be received with greater respect. The "aggravated condition" or case cited by him was that of a woman whom he had operated upon for carcinoma of the breast, and in which a small sinus or stitch abscess remained, so that the wound did not heal properly. He injected peroxide and followed it up with bichloride of mercury! To his "surprise" he noticed that the sinus became larger and infected; that "inflammation, which was heretofore absent, now made its appearance, and soon the whole area was nothing less than a bag of pus." His explanation is, that,

"in this case, there is no doubt that the expansive force of the peroxide made new channels and forced and deposited pyogenic organisms into these channels from the original sinus."

Forced and deposited pyogenic organisms into new channels! This will doubtless be received as startling news by the thousands of American and European surgeons, who have long used this invaluable agent with the greatest confidence, believing that "as the ferret hunts the rat, so does peroxide of hydrogen follow pus to its narrowest hiding place; and 'pyogenic organisms' are as dead as the rat that the ferret catches when the peroxide is through with them."* It is the pus itself that burrows and forms new sinuses; but it is H_2O_2 (whose especial property of eliminating oxygen is of unparalleled value in the distention of these suppurating sinuses and cavities) that searches out and destroys the aforesaid pus, when it is almost impossible to reach the unhealthy surfaces by any other means.

But the resultant disintegrated and oxidized discharge should have exit somewhere. Dr. Spencer's obvious error was in bottling it up and putting the cork in. He performed this latter act when he injected the bichloride *after* the H_2O_2 , which caused much of the mischief; or, rather, it had been better in this case were it [the bichloride] not injected at all. The germicidal actions of $HgCl_2$ and H_2O_2 are essentially different: the one being a preventive and the other a cure. Using the latter first and the former last, therefore, is like putting the cart before the horse. H_2O_2 disintegrates and oxidizes all the dead tissue with which it comes in contact. It has no injurious effect on animal cells; but its energy is devoted to the destruction of vegetable cells, *microbes*, and is, therefore, especially good in

* Dr. Robert T. Morris, in the *Journal of the American Medical Association*, August, 1890.

cleaning sinuses filled with pus. Any trace of pus remaining in any recess which an ordinary douche will not reach, is at once sought out by the peroxide, decomposed, and brought out by bubbles of gas. It has been found best to inject a small quantity with a *double current* catheter, wait until foaming ceases, and repeat injections until the last one fails to bubble, when we know that the pus cavity is chemically clean. On the other hand, it is well known that bichloride of mercury forms an impenetrable covering (an albuminate) over albuminous substances; that it forms insoluble compounds with many of the azotized organic principles, especially albumin: indeed, it is in this very way that these substances are preserved from decay, and the antiseptic properties of the mercurial agent demonstrated.

In summing up, therefore, it may be said that in Dr. S.'s case, owing to this mechanical occlusion of the exit, "paths of least resistance" were sought; that the salutary effect of the peroxide was immediately offset by the chemical action of the bichloride, which formed its customary insoluble albuminate, and thus, from the consequent loss of fluidity, prevented, in this now practically inclosed cavity, the oxidized discharges from being properly eliminated: the result of all which was further septic infection, inflammation, and burrowing of the pus into new territory.

—:O:—

OBSTINATE VOMITING.—

R Menthol, 0.02.

Tinct. thebaici, 5.

Spir. rectificat., q. s. ad 20.

M. Sig. Ten to twenty drops as often as necessary.—*Pick, Münchener med. Wochenschrift.*

TAPE-WORM TREATMENT. — Norweighton proposes (*Therap. Monat.*)

R Sodii puri., gr. 14.

Kalii iod., gr. 45.

Aq. dest., 3 j.

M. Sig. Ten drops three times a day.—*Louisville Med. Mon.*

Current Literature.

"Eudoxine in Pædiatric Practice," by Gustavus M. Blech, A. B., M. D. Reprinted from the *N. Y. Medical Journal*.

"Advice to Gonorrheal Patients," by Ferd. C. Valentine, M. D. Reprinted from the *Philadelphia Medical Journal*.

"The Restoration of a Deflected Nasal Sæptum," by Beaman Douglass, M. D. Reprinted from the *N. Y. Medical Journal*.

"Electric Treatment in Gout and the Uric Acid Diathesis," by Robert Newman, M. D. Reprinted from the *Medical Record*.

"Fibro-Sarcoma of Right Orbit," by F. M. Wilson, M. D. Reprinted from the *American Ophthalmological Society Transactions*.

"Two Cases of Iridotomy Under Discouraging Conditions," by F. M. Wilson, M. D. Reprinted from the *Archives of Ophthalmology*.

"A Number of Lens Cases Illustrating Heredity," by H. S. Miles, M. D. Reprinted from the *Annals of Ophthalmology and Otology*.

"Air Inflation of the Bladder, Preliminary to the Bottini Operation, as proposed by Dr. Bransford Lewis." Editorial from the *Medical Review*.

"Electricity in Genito-Urinary Diseases," by Robert Newman, M. D. Reprinted from the *Transactions of the American Electro-Therapeutic Association*.

One is sure to find in the pages of the *Cosmopolitan* some topics of immediate interest, and in all the output of the September magazines no article so holds the reader as M. Saint-Just's detailed description of the organization of the French secret service. The writer knows his subject as he was former Chief of Division in the intricate organization. The reader lays the article down bewildered at the conception of the

web which has been woven closer and closer around the French people since the days of Napoleon.

"A Case of Senile Hypertrophied Prostate With Marked Urinary Obstruction; Bottini Operation; Relief. Later, Herniotomy, Sepsis and Erysipelas; Death. Pathological Specimens Showing Effect of the Bottini Operation," by Bransford Lewis, M. D. Reprinted from the *American Journal of Surgery and Gynecology*.

Charles Warren Stoddard, who has written so charmingly of the South Seas, and William W. Denslow, the artist, went on a pilgrimage to the Pictured Rocks of Lake Superior, and came back with a story of that region and some pictures of the scenery so remarkable that *The Cosmopolitan* has given up fourteen pages of its September number to them. Article and pictures constitute a strikingly interesting feature.

The September number of *The Cosmopolitan Magazine* can well be termed "The Timely Topic Number," for it contains an authoritative article on International Yacht Racing, by John R. Spears, the naval historian, lavishly illustrated, and clever descriptions of New York's roof-gardens, by Vance Thompson, with such photographs of those aerial places of amusement as were never printed before, an article on the French Spying System by a former Chief of a department of the French Secret Police, and the story of the mountain fueds of Kentucky, told by a well known Kentuckian, Col. J. Stoddard Johnston. Aside from this there is much excellent fiction and the usual number of profusely illustrated and interesting special articles.

"The Art of Buying Food for a Family," by Mary Graham, is an able paper in the September *Cosmopolitan* on the very practical subject of purveying for a household. The writer shows just where the average housekeeper is wasteful, and tells many things that will enable a purveyor to supply her family with variety in food at less cost than that with which

she now endeavors to maintain a household with a too frequent accompaniment of complaint and criticism. This *Cosmopolitan* seems to be a household need, for it contains another article in the same vein, by Anna Leach, in the "Delightful Art of Cooking." It is remarkable what a wealth of information she crowds into a few pages. One longs for meals prepared and served as she suggests. She promises endless variety, just as cheaply, too, when one learns to prevent the wastefulness which is the besetting sin of the American kitchen.

SEPTEMBER LADIES HOME JOURNAL. The September issue of *The Ladies Home Journal* is an unusually attractive number. On the first page is given a series of pictures of "The Wayside Inn of Sudbury Town," made famous by Longfellow. Barton Cheyney contributes an instructive article on "The Young Man and the Professions," telling young men how to take up the study of law, medicine, architecture, etc. Charles T. Brodhead has an illustrated article on "The East-Side Girl of New York," and Patti Lyle Collins tells "Why Six Million Letters Go Astray Every Year." Neltje Blanchan contributes her seventh paper on "Nature's Garden," telling of the wild flowers that bloom in September. An interesting page of pictures is presented showing "The Social Side of the Trolley," and there is also a double page of pictures of "The Prettiest Country Homes in America." Julia Marlowe writes of "Dramatic Performances by Amateurs." "Bringing in the Sheaves," by John Northern Hilliard, is a timely account of harvesting in the West. "The Confessions of a Worrier" is the unique title of a paper by Mary Boardman Page. The article suggests different ways in which the worrying habit may be overcome. The Rev. Newell Dwight Hillis, D. D., contributes the fourth article in his series on "The Secrets of a Happy Life," his subject being "Sons of Greatness and Goodness." Caroline B. Le Row tells "What it Means to be a Teacher," and there is a page of pictures of "Attractive Decorations for the Schoolroom." Edith

Lawrence writes her usual vivacious letter, "The Gossip of a New York Girl," in which she describes the newest ideas in fashions from abroad, and Emily Wight has an illustrated page on "Dresses for Children." A page is devoted to "Twelve Designs for Patchwork Quilts." Frances E. Lanigan tells "How Some Girls Have Earned Money" in many unusual but practical ways. The fiction of the number consists of the last of "Ol Peckham's Opinions;" "The Dauphin's Swiss;" the fifth installment of Anthony Hope's latest romance, "Captain Dieppe;" the conclusion of "My Stylish Cousin's Daughter," by Josiah Allen's Wife, and a story for children, "Little Debby's Dinner for the New Parson."

The September number of the *Journal* is also complete in its practical features. Edward Bok answers many of his correspondents in a column of "Problems of Young Men;" Mr. and Mrs. Edward B. Warman give "Five-Minute Talks on Good Health;" Maria Parloa describes some new things for lightening the work of the housekeeper, and Mrs. Rorer gives some menus for "Dainty Meals for Small Families." The September *Journal* is certainly worth having. By the Curtis Publishing Company, Philadelphia.

THE NEW LIPPINCOTT MAGAZINE FOR SEPTEMBER, 1899.—The complete novel in the *New Lippincott* for September is entitled "The Duchess of Nona," by Maurice Hewlett. This is an Italian story of the picturesque and dramatic days of Cæsar Borgia. A young English girl of simple birth ascends the Ducal throne of Nona and is wretched in her rich surroundings. The passion of an Italian lover brings on a crisis which has the charm of a great stage picture. Mr. Hewlett's handling of the plot is masterly, and his power has never been so evident as in this magnificent scene.

The short fiction of the month is made timely and brilliant by a story of Mrs. Schuyler Crowninshield, the wife of Admiral Crowninshield of the Navigation Bureau at Washington. "Marta's Inheritance" is one of this gifted author's most characteristic Cuban stories, where Spanish Dons,

pretty women, witty dialogue, and a decided dash of adventure combine to allure and sustain interest.

Ruth McEnery Stuart contributes "Picayune: a Child Study." The reader suspects a fear, but finds a smile, so intimately blended are humor and pathos as he follows the fortunes of little "Steve," whose "reg'lar circumf'rence legs" are to the poor black boy so great a source of early sorrow and later profit.

"Donald Murray's Romance," by E. F. Benson, author of "Dodo," is a study of hope deferred in the heart of a lonely English bachelor. "The Volcano Goddess: a Legend of Hawaii," by Charles M. Skinner, is both exceedingly curious and seasonable. "A Sunday Eclogue," by Maurice Thompson, is a humorous story of a Sunday's forbidden fishing in Virginia that will be found quaint and enjoyable.

Under the title "The Effrontery of Paul Jones," George Gibbs gives a clear, picturesque description of the capture of Whitehaven by the dauntless Paul Jones and his little boat "Ranger." "Where Stockton Wrote His Stories," by Theodore F. Wolfe, M. D., Ph. D., will appeal to every one who has enjoyed the fruits of Mr. Stockton's wonderful imagination. "Entertaining English Royalty," by "Ignota," gives intimate and interesting particulars relating to Royal English house parties such as are now seasonable. Other papers of unusual merit and timeliness are: "The Question of Yachts," by Charles Ledyard Norton; "Effects of Equal Suffrage in Colorado," by Virginia G. Ellard; "The National Export Exposition," by Dr. W. P. Wilson; "Thirst: a Thrilling Incident of Southwest Texas," by Albert Bigelow Paine; "Bronze Button Heroes: a Study of the G. A. R.," timed to the great gathering at Philadelphia, by George Morgan; and "Anecdotes from the Antilles," by the Hon. John Stephens Durham, ex-Minister to Haiti and San Domingo.

The verse of the month is rendered unique by the appearance of two brief but pointed poems by Mr. I. Zangwill, "In the Morgue," and "In the City." There is also a graceful poem by Florence Earle Coates; and a quatrain by Madison Cawein.

Abstracts.

IRREGULAR MENSTRUATION IN YOUNG WOMEN DUE TO ANÆMIC CONDITIONS.—The young physician just starting into practice cannot help but be impressed with the frequent occurrence of menstrual disorders in young girls during the period just succeeding the age of puberty. The metamorphosis of a girl into a woman, consisting as it does of structural and functional changes throughout her body, in many instances leaves behind pronounced alterations in the quality or even quantity of the blood current. How common it is to have a mother bring her daughter to the physician and say, "Doctor, I would like to have you do something for my daughter. For nearly a year she has been losing interest in everything and seems to be completely worn out. She has no appetite and absolutely no ambition for work, study or play. She does not lose flesh or grow thin at all, but her color is so poor and she seems so weak that I fear she is going into consumption."

Inquiry on the part of the doctor elicits the further information that the young lady in question is sixteen years old or thereabouts, and that she is a school girl. A year or two ago she first menstruated, and since that time has been unwell only twice, or at irregular intervals varying anywhere from three to nine months. Her bowels are either constipated or the reverse, and she may complain of headaches, vertigo, palpitation of the heart, insomnia, indigestion, etc., etc. The pale face with its sallow, greenish tinge, the bleached tongue, the colorless conjunctivæ and finger nails, tell well the tale of impoverished blood. Combine the history with the objective symptoms and the diagnosis is clear of chlorosis or green-sickness. The absence of cough or pulmonary symptoms excludes the dreaded "consumption," but we have instead a condition of the blood in which the essential constituents are diminished and the whole quality of the life-giving current so depreciated that the various organs of the body are unable to perform their normal functions. The

uterus is small and illy developed and the supply of rich blood it so urgently requires in its developmental state is not to be had. Is it any wonder, then, that the chlorotic girl does not menstruate regularly? It is a great wonder that she ever menstruates at all. Correct the anæmic or impoverished condition of her blood and the physiological function of her uterus will be resumed as naturally as that of any other organ.

How this chlorotic condition can best be corrected is the next question and one which because of its frequency concerns every practicing physician. Countless remedies have been presented to the profession, but far and foremost above them all is iron, notwithstanding certain high authority to the contrary. Arsenic is certainly valuable, but it ranks far below iron or even manganese in the therapeutics of anæmia. In order to be most efficacious, however, the iron should be in its most readily assimilable form, and until recently the carbonate and albuminate have been supposed to present this requisite in the highest degree. But since manganese has grown in favor as an adjuvant to iron, a new preparation has been submitted to the medical profession *and in every way it has proven itself an ideal one*. I refer to Dr. Gude's preparation of the peptonate of iron and manganese, known as pepto-mangan. This admirable combination of iron and manganese is readily taken into the human economy and appropriated to its needs, without deranging the weakest alimentary tract, or hindering in any way the normal processes of digestion, assimilation and excretion. It should be given in water or milk in teaspoonful doses after meals, and its administration is invariably followed by the results desired.

But in order that the medical treatment of chlorosis may be most valuable and efficient, it should be augmented by auxiliary treatment consisting of careful attention to diet and exercise. It goes without saying that the food of an anæmic girl should be most nutritious and particularly abundant in albumen, while the exercise should aim to provide greater quantities of oxygen in the form of pure air, without lower-

ing the vitality. Walking, skating, tennis or bicycling in moderation are all able to supply the demand for exercise.

Treatment laid down on the above lines, followed out in every instance with good habits of hygiene and a careful observance of Nature's demands, will regulate the various functions of the body, and the menstrual function will prove no exception to the rule.

The following cases will substantiate the above:

CASE I. Miss C. S. K. Seventeen years old. Decidedly anæmic and much troubled with constipation. First menstruated at fourteen, since which time she has never been regular, flowing profusely sometimes twice a month, and other times going three or four months without menstruating at all. Has frequent fainting spells and a decided anæmic heart murmur. At time of coming under observation had not menstruated for two months and ten days.

Treatment consisted of a regulated diet, tablets of aloin, strychnine, belladonna and cascara sagrada, one each evening until bowels were regular, and teaspoonful doses of pepto-mangan (Gude) after meals. Gradually the fainting spells and heart symptoms disappeared, and on the fifteenth day after commencing treatment she began to menstruate, the flow being natural in quantity and continuing four days. Treatment was continued and twenty-nine days later she menstruated again, continuing this time five days. Soon after this the pepto-mangan was stopped. From now on, up to the present time, a period covering three months, her menses have appeared regularly every twenty-eight days.

Her whole appearance has changed and in every respect she appears well and strong. Period of administration of pepto-mangan, fifty-five days.

CASE II. Miss K. M. Aged twenty. Menstruated first at age of fifteen and was fairly regular for three years, but since an attack of typhoid fever, two years ago, has never known when she was going to be unwell. Patient was not thin, but face was pale and yellowish, hands and feet were cold "all the time," and her whole condi-

tion was one of "*blood poverty*." Complained of frequent attacks of diarrhoea following constipation.

Treatment consisted of plenty of out-door exercise, good food with abundance of milk, and pepto-mangan (Gude) in teaspoonful doses after meals.

Her restoration to health has been rapid and satisfactory. She has menstruated three times since beginning treatment, the longest interval being thirty-one days. Says she is all right, and her appearance certainly sustains her words.

In this case the administration of pepto-mangan covered a period of thirty-six days.

CASE III. Miss D. L. School girl. Aged fourteen. For two years she had been troubled with headaches, dizziness and short breath, fainting away at the slightest provocation. Had no appetite, and, as her mother expressed it, "for the last six months has been going down hill pretty fast." Had been treated by a physician for heart disease, but received no benefit. Menstruated first seven and a half months ago, "but had not seen anything since."

Examination showed heart to be normal, although it was a trifle fast, and a slight murmur could be determined when patient was in a recumbent position, evidently anæmic in origin. Lungs proved to be all right.

Her general condition was anæmic and she was put on pepto-mangan (Gude), a teaspoonful after meals, and sent into the country where she could be out doors most of the time and have plenty of eggs and milk. A letter from her mother says that she has changed so that she can hardly believe it is the same girl. Furthermore, her menses appeared twenty-one days after starting the pepto-mangan and returned again twenty-nine days after. The pepto-mangan was ordered stopped and since then I have not heard direct from the patient, although from her father I learn that she is "perfectly well," and coming home soon.

Period of administration of pepto-mangan, fifty-six days.

CASE IV. Miss L. Aged eighteen. Had never menstruated. Her general appearance was one of profound anæmia. A careful examination

eliminated no abnormality of genital apparatus. Organs normal in relation, but undersized. Prescribed pepto-mangan in teaspoonful doses after meals and gave general directions as to diet, etc. Began to menstruate thirty-two days after beginning treatment, the flow continuing one week. Twenty-nine days later, she menstruated again. At the present writing she is still under treatment and is due to menstruate in seventeen days. Her whole condition is very much improved.—H. Edwin Lewis, M. D., Burlington, Vt., Resident Physician Fanny Allen Hospital. Reprinted from the *Vermont Med. Mon.*

BELLADONNA AND GLAUCOMA. — The *Eclectic Med. Jour.* says that it is a well known fact that the instillation of atropine will develop glaucoma in an eye where there is a tendency to the disease, the drug being often the exciting cause, and when either the alkaloid or the belladonna is given internally in doses sufficiently large to produce the same mydriatic effect, the result would necessarily be the same. It is well in old persons to give belladonna sparingly and watch closely for any eye manifestations. Should such occur, the drug should at once be discontinued. Spirit jaborandi will often relieve the distressing eye pain, and the instillation of eserine will give the most prompt relief.—*The Med. Stand.*

TREATMENT OF NEURASTHENIA.—Dr. Collineau, in the *Gazette des Hôpitaux*, says that the treatment of neurasthenia must be hygienic and medical. Hygienic, must take into consideration the diet and the patient's surroundings. Medical, must include the consideration of pharmaceutical agents, as well as physico-chemical agents (massage, muscular exercise, electricity).

The adoption of an alimentary regimen suited to the real needs and physiological aptitudes of the patient is of prime importance. Most neurasthenics are arthritics and are also usually dyspeptics. Solid and liquid food, quantity and quality, must all be regulated.

As a general proposition, it can be said that neurasthenics eat too much. It behooves us then to limit their diet and to limit it to the actual needs of the system. This can only be determined by careful experimenting.

Broths, gravies, spices, must be excluded from the neurasthenic's diet. Fresh butter can be allowed, Bread in small quantities is permissible.

As to beverages, only one can be allowed, that is water. Large quantities must be used, so as to maintain arterial tension, irrigate the tissues and facilitate disassimilation. Spirits, wine, beer, cider, owing to the fact that they retard oxidations, must be rigorously forbidden. Milk is serviceable.

The purpose of the regimen established is three-fold.

1. To provide for the real needs of the organism.
2. To spare the digestive apparatus useless labor.
3. To reduce to the minimum the accumulation in the system of waste food-products.

It is important to bear in mind that the organism consumes only according to its needs. Its functional energy is not subordinated to the quantity of food ingested. It is an error for a neurasthenic to take more food than he can utilize. The notion that suralimentation increases the patient's strength, does not rest on physiological data.

Hypopepsia will be an indication for a more rigid alimentary regimen; hyperpepsia will be an indication for greater freedom as regards diet.

Medical treatment of neurasthenia will include a few pharmaceutical preparations and the use of a few physical agents, such as massage, hydro-therapy, electricity. Among the therapeutic agents may be mentioned; (1) the alkalies, sodium bicarbonate, from four to seven grams daily, Vichy and similar waters; (2) the cholagogue cathartics, such as quassia, podophyllin, calomel, salol (which is always useful as it promotes oxidations); (3) iodide of sodium with a milk diet, at intervals only and then only when arteriosclerosis is present.

As to physical agents:

Massage (abdominal) is useful to

combat constipation and abdominal plethora. Though the results of this procedure are not constant, its value as a therapeutic agent cannot be gainsaid. Hydro-therapy is useful in in somnia and nervous irritability.

Electricity is not a specific in nervous disorders. It is purely and simply an agent of value to provoke certain physiological reactions.

Muscular exercise increases the activity of the fundamental functions of the organism: respiration, circulation, digestion and calorification. The amount of exercise taken must be proportioned to the patient's strength.—*The Medical Standard*.

SUMMER DIARRHEA IN INFANTS.—

Abroad, of late years, a good deal has been said of the value of tannigen in controlling the stools. Dr. Blackader, of Montreal, in *Progressive Medicine*, in an excellent review of the recent literature on summer diarrheas, quotes no less an authority than Escherich, the well known Professor of Children's diseases at the University of Graz, in Austria, who speaks very favorably of tannigen and claims for it a distinct disinfectant and bactericidal effect. Kraus and Biedert have also written in its praise, especially for chronic intestinal catarrh. It is a tasteless powder, therefore easily administered and is given in doses of 2 to 5 grains four times a day. It is especially useful in cases of follicular enteritis, where local measures are of little avail. Its administration is continued in lessened doses after the acute symptoms have subsided, and it is said to hasten convalescence, which is often apt to be tedious.—*Medical News*.

INFLAMMATORY DISEASE OF THE OVARY AND TUBE, DUE TO APPENDICITIS.—A. J. Ochsner, in the *Jour. of the Amer. Med. Asso.*, gives a table of 103 appendectomies performed at the Augustana hospital. These are divided into three groups: The first includes children of fifteen years of age and younger, of which there are five boys and six girls; adults with uncomplicated appendicitis, thirty-four men and thirty women; appendicitis with secondary infection of

the adnexa, fifteen cases; patients suffering from primary infection of the adnexa and secondary appendicitis, thirteen cases. There were ninety patients suffering primarily from appendicitis and thirty in which the primary disease was in the adnexæ or else both the appendix and tubes were so extensively implicated that it was impossible to determine the primary seat of the inflammation. The writer thinks that in appendicitis secondary infection of the right ovary and tube has been very much underestimated. Inflammation of these structures upon the same side, and sometimes upon the opposite, is frequently noted. This condition is especially likely to give rise to chronic invalidism because of the periodic exacerbation resulting from the congestion due to menstruation. In operating for pyosalpinx the condition of the appendix should always be determined and in operating for appendicitis in cases of recurrent dysmenorrhea, the right ovary and tube should be examined.—*Ex*.

DIGITALIS.—Dr. George M. Waters, (*Columbus Med. Jour.*) in an article on "Digitalis and the Heart," quotes Dr. E. R. Squibb as follows:

There are probably few substances in the materia medica of more importance than digitalis, and I beg to remind you that it earned and won this importance as digitalis and not as any one of the so-called active principles. It is within my time that the fine large leaves of the first year's growth should be rejected in favor of the smaller leaves of the second year, and that these should be gathered during or just after inflorescence. Then it was shown that wild, indigenous plants were better than cultivated plants, and that a certain degree of care was necessary in drying and transportation and, finally, that especially in the presence of moisture the activity diminished after two years, and unless very well cared for the stock should be renewed annually. Then it was shown that a well made fluid extract was the best representative of the drug, and was practically unchangeable—that the tincture was next best, but the solid extract not trust-

worthy, probably from being made with heat. This is the digitalis, that for the past fifty years has accumulated its character and importance by its utility and has established the digitalis effect. Now it seems trite to say that if you need this digitalis effect and will go to such digitalis for it, you will get it.—*The Med. Stand.*

ANTISTREPTOCOCCIC SERUM IN PUERPERAL FEVER.—A. G. Deerdorff, in the *Annals of Gyn. and Pediatrics*, contributes a most enthusiastic article on the use of antistreptococcic serum in a case of puerperal infection. The writer states that it was the most severe case that had ever come under his observation. Three days after an abortion the patient was seized with faintness and with obscure vision. In about an hour depression was very marked. The heart's action was weak. A curettage was done, which removed some decomposing fragments of placenta. Following the curettage, the temperature rose to 103° and the pulse-rate to 130. The following morning seven cubic centimeters of antistreptococcic serum (P., D. & Co.) was given and at the end of six hours the temperature had fallen to 101° , when a second dose of six cubic centimeters was given. The heart acted badly for three days, but large doses of digitalis and strychnine improved matters. The serum was administered morning and evening in doses of three to four cubic centimeters for eight days. At the end of ten days the temperature remained normal, the pelvic conditions cleared up and the patient made a good recovery.—*Ex.*

STERILE OR ANTISEPTIC LIGATURE MATERIAL.—Dr. Hægler (*Centralbl. f. Chir.*) reports the results of his study of this question. The numerous cases in which ligatures are discharged from wounds sometimes after an apparent aseptic healing led him to make a careful study of the sero-purulent discharge found with them and of the ligatures themselves. Cultures showed that the discharge was free from bacteria, but microscopic sections of the knots of silk

ligatures showed numerous bacteria in the substance of the ligatures.

The ligature material had been carefully tested before it was used, but still the bacteria were found. The author then made the observation that a perfectly sterile ligature drawn through the hand, sterilized so far as possible, would yet become infected from the skin. If, however, the hand was recently dipped in a sublimate solution the infection did not occur. As a consequence, he determined to employ sublimated silk ligatures. No further discharge of ligatures has been noted since this plan was adopted, some three months previous to the author's report.

It is not necessary to leave the ligatures in the sublimate solution for a long time, as the same result can be attained by boiling them in the solution.—*N. Y. Post-Graduate.*

THE USE OF SEPARATE BEDS FOR MARRIED COUPLES.—In an article on the "Bedstead," one of the last published by Lawson Tait (*Birmingham Medical Review*), he says: "The additional comfort obtained by every English man and woman on a visit to the continent, when they found in their bed-rooms two snug little single bedsteads placed side by side, made no impression till about ten years ago, when a few venturesome islanders began to dare the breath of scandal by having separate beds. There can be no doubt that this was the reason why the improvement was resented, for to this day the proof of the worst that can be circulated concerning a married couple is that 'they occupy separate rooms.' The use of separate beds was, and is to some extent still, regarded as almost as scandalous. Yet in all the best homes in our country each bedroom has attached to it a 'dressing-room,' with a single bed in it, and by this a great increase in comfort and health is attained. Now that we know that consumption is a disease communicated from one to another by contact and breathing the air already breathed by the consumptive, the hygienic precaution of separate beds ought to receive some public recognition. For centuries the Ital-

ian physicians have taught the possibility of the disease spreading from husband to wife and from one person to another, when a tainted and a healthy person have occupied the same bed. There are doubtless many other diseases of which the same is true."—*Canadian Jour. of Med. and Surg.*

SIGNALS OF THE PRE-ECLAMPTIC STATE.—Charles Jewett, in the *Brooklyn Med. Jour.*, says that the chief renal symptoms associated with the pre-eclamptic state relate to albuminuria, diminished urea excretion, and scant quantity of urine.

Albuminuria.—The precise value of the presence of albumin in the urine has not been definitely determined. It is agreed that albuminuria exists before the first convulsion in from 84 to 91 per cent. of cases. This particular signal of approaching danger is an especially valuable one, because of the facility with which it may be detected. As a diagnostic measure this would not be so bad, but for the fact that the examinations, as a rule, are made at long intervals. If made twice each week, in the majority of cases sufficiently early warning would be given for the institution of remedial measures. In the writer's experience, albumin is found in the urine even more frequently in these cases than is indicated by the above figures. In his private practice, true eclampsia has never been associated with the persistent absence of albuminuria.

Urea.—Urea is a valuable clinical index of the excretory activity of the kidneys, and one may usually feel secure so long as the urea excretion is near the normal. Notable diminution of this constituent should always excite suspicion, and a marked falling off is usually of grave import.

Quantity of Urine.—This is especially useful as a clinical guide, since it is a matter that can be trusted largely to the patient's own observation. If the quantity remains above three pints in the twenty-four hours, eclampsia is a very great rarity. There may be a chronic nephrosis in which the quantity of urine is large, but eclampsia in such cases is infrequent, unless an acute lesion super-

venes upon the chronic. The importance of quantity as a signal, relates especially to the patient in whom there has been no pre-existing nephritis. Even in the presence of albuminuria and diminished urea excretion, eclampsia will not occur so long as the volume of urine can be maintained—about seventy ounces in twenty-four hours. The quantity of toxic material which passes off in the urine is not measured by the percentage of urea elimination. An excessive flow of urine can usually be trusted to rid the tissues of the eclamptic poisons, even though the urea be diminished.—*Ex.*

THE DIPLOCOCCUS OF PREGNANCY?
The *Med. Age* commends the following anecdote to the consideration of Prof. Schenck and his enthusiastic followers: A clergyman, walking on the outskirts of his parish one day, found one of his parishioners whitewashing his cottage. Pleased at this novel manifestation of the virtue that is next to godliness, he complimented the man on his desire for neatness. With a mysterious air, the worker descended from the ladder, and approaching the fence, said: "That's not exactly the reason why I'm a-doin' this 'ere job, your worship. The last two couples as lived 'ere 'ad twins, so I says to my missus, 'I'll take and whitewash the place so there mayn't be no infection.' You see, sir, as how we've got ten of 'em already."—*N. Y. Med. Jour.*

NEW METHOD OF INDUCING PREMATURE LABOR.—Spinelli (*Archivio Italiano di Ginecologia; International Med. Mag.*), asserts that his method can be performed by the general practitioner; no especial instruments are necessary, and it starts labor in two or three hours with no danger. The patient being prepared for operation, the posterior lip of the cervix is seized and the cervix dilated with a dilator, if necessary, to admit one finger. The finger is crooked and carried up until the membranes are detached from the posterior surface. A yard of gauze saturated in 10 per cent. ammonium ichthyolate and glycerin is then passed up on

the finger and digitally pushed up higher and higher, care being taken not to rupture the membranes. Nearly the whole of the gauze can be introduced. The vagina should be plugged with sterile gauze and the patient put to bed. Pains begin very soon after the introduction of the gauze, and labor comes on rapidly.—*N. Y. Med. Jour.*

IMMUNITY OF ARABS FROM TYPHOID FEVER.—Some time since, M. Vincent reported at a meeting of the Academy of Medicine held in Paris, that it was his observation that the Arabs were not one-hundredth as susceptible to typhoid fever as French soldiers. In his opinion, this immunity does not rest on a previous attack, nor in the individual is it gradually developed from the use of water contaminated with typhoid germs, but it is a natural immunity. The blood on examination shows no serum reaction and has the ability to resist the invasion of typhoid fever germs.

The great immunity enjoyed by the Arab is largely attributed to his general abstemious habits and to the simple vegetable diet to which he confines himself.—*Lancet.*

PEPTONURIA IN SCARLET FEVER.—M. Hemser (*Vratch*) records observations which he has made as to the occurrence of peptonuria in scarlet fever. The following are his conclusions:

1. The urine in scarlet fever very frequently contains peptones; they are usually present in a moderate degree, and are rarely abundant.

2. Hemser confirms the fact, observed by others, that peptonuria is not necessarily associated with albuminuria; both may be present at the same time, but the conditions are independent.

3. In cases complicated with pneumonia, peptones were seldom found in the urine, and, if present, their appearance was noted on the third day of illness, and they entirely disappeared as soon as the crisis ensued. On this point the author differs from other observers, since it is usually stated that peptonuria oc-

curs in pneumonia as the temperature begins to fall.

4. The severity of the disease has no bearing whatever upon the occurrence of peptonuria. Indeed, according to the author's observations, it is more apt to develop in mild than in severe cases. Hence the prognostic value of peptonuria is doubtful.

5. In view of the statement made by several authors that peptonuria does not always imply that suppuration is taking place in some part of the body, it must be mentioned here that in all the cases referred to by Hemser there were constantly present inflammation of the inner ear and the lymphatic glands, with tendency to pus formation.

6. Ervant's test (potassic mercuric iodide) has often failed to produce the characteristic precipitation where peptones were proved to be present in the urine by other tests; on the other hand, it formed a precipitate when peptones could not be detected.

7. Lastly, the author is inclined to discredit Schultzer's statement that the production of peptonuria is greatly influenced by high temperature; in his cases no such relation between high temperature and peptonuria could be made out.—*Brit. Med. Jour.*

SCIENTIFIC TREATMENT OF GONORRHEA.—Valentine has published an article upon "Chronic Gonorrhea," of which the following is a summary (*Med. News*):

1. There are no incurable cases of chronic urethritis.

2. All drugs suggested for the treatment of chronic gonorrhea are soon relegated to merited oblivion.

3. The only efficacious method of treating chronic gonorrhea is by dilations, as proposed by Oberlander, followed by irrigations without a catheter, of the urethra or bladder or both.

4. Urethral fever or other disturbance does not supervene after urethral instrumentation, followed by irritation.

5. Carefully conducted dilations and irrigations are not painful.

6. Gradual careful pressure by dilators is preferable to the use of sounds in the majority of cases.

7. The effect of dilation is to stimulate absorption of the infiltrations.

8. Functional disturbance and nervous symptoms are improved very early in the treatment.

9. Chronic urethritis can be exceptionally diagnosed and successfully treated, but never pronounced cured without the aid of the urethroscope.—*Hot Springs Med. Jour.*

WATER IN THE TREATMENT OF DISEASE.—W. Howship Dickinson, M. D., F. R. C. P., (*Lancet*) says:

When urea and allied poisons accumulate in the body in renal disease water is the surest of eliminants. It cannot leave the body as urine without taking with it more or less of these accumulations. The urea excreted in renal disease is increased in proportion to the amount of diuresis. In some forms of chronic disease of the kidney, particularly of the granular kind, the urine is poor in quality, but excessive in amount; the patient is habitually athirst and drinks abundantly. This is his salvation. If he is so ill-advised as to greatly reduce his drink, the urine, too, will diminish and uræmia may declare itself. *Mutatis mutandis*, similar rules apply to diabetes. Water washes out the sugar and special toxic material, be it acetone or only something resembling acetone, which the diabetic process engenders; and helps to keep the system clear of the poison. Conversely the stinting of water adds to the danger of the disease. Large drinking of water may stave off for a time diabetic coma, and the same deadly condition may be suspended by the copious introduction of an aqueous solution into the veins. Consciousness may be completely, though temporarily, restored. Dr. Dickinson once had the almost incredible amount of 456 ounces thus injected in two operations within the space of 32 hours (*Transact. Clinical Soc.*). The patient was comatose; she could be roused for a moment, but not so as to answer intelligently, at once relapsing into insensibility. After the injection of 106 ounces she recovered complete consciousness, but only retained it for twenty-five minutes. After the

subsequent injection of 350 ounces she recovered consciousness, though not immediately, and retained it for about eight hours. It was observed that the urine passed after the operation no longer gave the acetone reaction, which before was strongly declared.

Gout is another disorder in which it is probable that the essential poison, be it what it may, finds an exit with the urine, and it is consistent, both with reasoning and experience, that this outgoing should be facilitated by water-drinking and diuresis.

There are many conditions of disease in which the body becomes water-logged. If there is too much water in the tissues or serous cavities, and all this comes, directly or indirectly, from what is swallowed, a very obvious suggestion is the cutting off of the supply. Some cavities in some conditions, notably the peritoneum in hepatic ascites, hold their contents so tenaciously, that it is seldom that any impression can be made upon them by dry diet. A remarkable exception was afforded by the case of a boy, aged 7. He had hypertrophic cirrhosis, presumably alcoholic, and ascites nearly to bursting. He was tapped ten times in fifty-five days, with the total removal of 47 pints. The hopelessness and the inevitable end of this continued tapping suggested treatment by dehydration. The drink was limited at its minimum to six ounces of water, a few small pieces of ice, and one and a half ounces of brandy in twenty-four hours. This was completely successful. The cure of the dropsy was immediate, complete and final. At his death, two years afterward, from an abscess of the brain, the peritoneal cavity was found obliterated by adhesions. The liver was markedly cirrhotic. Dr. Dickinson has tried the same plan in other cases of hepatic ascites, chiefly in adults, with but limited success. Renal dropsy may be more amenable than hepatic, but cannot be subjected, without risk, to a method of treatment which invites uræmia. Cardiac dropsy may be thus treated without danger, and often with much advantage, whether the accumulations be in the cellular tissues or in

the serous cavities. In one instance a large diminution in the bulk of a great ovarian cyst occurred as the result of a course of dietetic dehydration. Limitation of drink in some forms of dropsy is remarkably well borne; the patient probably utilizes his own accumulations and feeds upon himself. The writer has reduced the daily drink to minima, varying from sixteen to two ounces in the twenty-four hours. Patient complained but little of thirst, and the tongue usually remained moist. When it became dry, which was seldom, the regimen was always discontinued or relaxed. One of the results was loss of flesh, no doubt due to the failure of saliva and of appetite, and inability to take the habitual amount of food.—*Med. and Surg. Review of Reviews, London, Eng.*

CARCINOMA OF THE PENIS.—The Congress had Küttner (Tübingen) to thank for something original on the prognosis of penis carcinoma. He recited the fact that surgery could do a great deal in this field, and in support of his statement said that 58 cases had been operated in v. Bruns' clinic, with 59.5 per cent. of cures, lasting from three to twenty-nine years. Still his attention was drawn by two cases to the fact that amputation and excision of inguinal lymph nodes by no means give hope of certain recovery. In the two cases mentioned, recurrence of the trouble was in the intra-pelvic nodes. The author, finding in the anatomies nothing to explain this, made a number of injections and found that merely the superficial lymphatic channels empty into inguinal nodes, while the deep ones follow the blood vessels and empty, many of them, directly into nodes situated within the pelvis.—*Courier of Medicine.*

WOILLEZ'S DISEASE (IDIOPATHIC PULMONARY CONGESTION.)—Carrière (*Rev. de Méd.*) sums up his study of this disease as follows:

"Woillez's disease appears to be produced by microbial agencies belonging to various species. The chief cause, however, is without doubt the Talamon-Frænkel pneu-

mococcus, other microbes capable of inducing the disease being the staphylococcus and streptococcus. In every case the virulence of these microbes is strongly attenuated. In cultures from this disease the pneumococcus loses its virulence on the fourth day.

When the pneumococcus is the cause the début of the disease is always sudden and violent. Fever is high and the intensity of the other symptoms especially marked.

The natural virulence of the pneumococcus produces pneumonia; when this natural virulence is attenuated we get Woillez's disease.

The frequency of idiopathic pulmonary congestion is about the same as that of pneumonia and pleurisy, and similar variations are noted from year to year.

Men are more frequently affected than are women, and especially men who are naturally subject to exposure or to rapid changes of temperature. The maximum decade for frequency is between the ages of 20 and 30."—*Med. Rev. of Revs.*

APPENDICITIS DURING PREGNANCY. Bouillier (*Thèse de Lyon.*) discusses this subject on a basis of 22 observations, considering (1) the influence of pregnancy on appendicitis, (2) the influence of appendicitis on pregnancy. As to the first point he concludes that pregnancy plays no part as an etiological factor in the causation of appendicitis. The pregnant woman is not more subject to this form of inflammation than the non-pregnant. The influence of appendicitis on pregnancy is, on the other hand, well marked. In 7 out of the 22 cases abortion at about the fourth month resulted, either before or after surgical treatment. Spontaneous abortion may be due either to the febrile condition and the affection of the general health, or to infection of the pelvic organs from the appendix; possibly to both factors. The mortality in the 22 cases was: Maternal, 30.4 per cent.; fetal, 47.8 per cent.; consequently pregnancy renders the prognosis of appendicitis more serious. The treatment is that of appendicitis, the pregnancy not constituting a contraindication. Early intervention

is desirable, since, if the case be left, there is grave danger of puerperal complications due to general infection or to direct infection of the pelvic organs.—*Ex.*

HERNIA OF THE VERMIFORM APPENDIX.—L. L. Hill reports two cases of hernia in which the appendix was found in the hernial sac upon operation. In one case, a man 60 years old, a partly reducible scrotal hernia had existed on the right side for twenty-five years. Signs of strangulation led to herniotomy, when the cecum and appendix were found in the sac; the latter was eight or ten inches in length and firmly adherent to the sac. The second case occurred in a woman, 48 years old, in which a reducible hernia had existed under Poupart's ligament for three years. Acute symptoms led to operation, and a strangulated appendix was found at the crural ring. From statistics it is concluded that the vermiform appendix is found in about 1½ per cent. of hernias, and that in not quite 3 per cent. of these cases the appendix is found on the left side. The appendix more frequently forms a hernia in children, being found in a little more than 2 per cent. of hernias.—*Ex.*

THE OPERATIVE TREATMENT OF VARICOSE VEINS.—Pierce Gould (*The Lancet*) reports fifty cases of Trendelenburg's operation for varicose veins. It will be remembered that this operation consists in excision between double ligatures of a short piece of the internal saphena vein in the thigh, the object of this procedure being to protect the varices from the pressure and reflux of blood from the common femoral vein and venous trunks above it.

In any attempt to appreciate the value of this operation, an account of its immediate results up to the time the patient leaves the surgeon's hands is of no value. It is all-important to learn the later history of the patient. This Gould has been able to do in thirty-nine out of the fifty cases, and personally has seen twenty-five of them. In no single instance did the operation fail to relieve the patient

of all pain, and it was invariably followed by a marked, often a very marked, shrinking of the dilated veins, sometimes to quite their normal size, in others to just short of that. This shrinkage may progress for many months. In no case did thrombosis develop above the ligature. The patients are usually kept in bed but a week.

One of the most troublesome complications of varicose veins is aseptic thrombosis; it is sometimes very painful, and is not free from danger to life from embolism, and the course of the disease under the common palliative treatment is often exceedingly slow and not infrequently followed by relapse. Under these circumstances it is reasonable to try whether surgery does not afford a better means of dealing with these cases than the older methods of rest, local sedatives, moderate diet, alkalines, salines and great patience. Thus Gould has treated two cases of aseptic thrombosis by excision of the thrombosed portion of the vein and immediate closure of the wound. Union by first intention was obtained. *Therap. Gaz.*

A SIMPLE METHOD OF REDUCING SHOULDER DISLOCATIONS BY MANIPULATION.—Miller (*Scottish Med. and Surg. Jour.*) commends, as almost invariably successful, a simple method of manipulation for subcoracoid dislocation. The patient is seated, the arm grasped at the wrist and above the elbow, and flexed to a right angle at the elbow. An assistant stands at the other side of the patient and steadies the scapula with both hands. The arm is then carried carefully outward and upward with outward traction until it is at right angles with the body. This procedure is designed to relax the supraspinatus and deltoid, to unlock the neck of the humerus from the deltoid edge, and to bring the humeral head in close apposition to the glenoid cavity. As soon as the muscles are felt to relax, an internal rotation of the humerus, produced by dropping the hand, will cause the articular head to glide into place. The additional aid of an anæsthetic, of free circumduction to enlarge the rent in the

capsule, or of pressure by the thumb and fingers in the axilla, upon the head of the humerus, may be required. While these procedures have been successfully employed by many surgeons in combination with other methods, the author claims to have systematized them upon a scientific basis.—*Med. Age.*

ADENITIS AND PHLEGMASIA FOLLOWING CHANCROID.—At a meeting of the Medical Society of the Hospitals, M. Galliard spoke of a case in which a man was attacked by gastric trouble and violent pain in the left thigh, which was rendered immobile by the anguish, and swollen to the groin. Palpation revealed the fact that there was a tumefaction in the iliac fossa which could not be moved and was undoubtedly of glandular origin. Gradually a phlebitis of the femoral vein and the large veins of the thigh manifested itself in an unmistakable manner. Seeking the source of this adenitis and phlebitis M. Galliard found two soft chancres situated in the balano-preputial groove. The sores healed and after a rather prolonged treatment—consisting of applications containing chloroform, and salicylate of methyl externally and internally, the administration of tincture of hamamelis, opiates and antipyrine—the patient was cured.—*Le Progrès Méd.*

POINTS IN FAVOR OF THE USE OF ALCOHOL AND THEIR REFUTATION.—Dr. Bienfait (*Gaz. hebdomadaire de Méd. et de Chir.*) examined point by point the various objections to total abstinence:

1. Is alcohol a digestive? No; its ingestion produces a passing excitation, interrupts the proper action of the muscles of the stomach because alcohol acts as an anæsthetic after having irritated the walls of the stomach, and it drives the blood to the skin and so hinders the action of the gastric juice.

2. Is alcohol an appetizer? No; it produces an excitation of the stomach which causes a sensation taken for hunger.

3. Is alcohol a food? No; it does not correspond to the definition of a

food, and the heat that it seems to produce does not serve as an actual warmth.

4. Is alcohol heating? No; it causes a flow of blood to the skin and a lowering of temperature.

5. Is alcohol a stimulant? In no case, either physical or intellectual.

6. Is alcohol a protector against contagion? No; it predisposes the body to contagion.

7. Can we live without alcohol? This idea that we cannot live without alcohol is a prejudice that numerous facts contradict.

8. Is alcohol good for children? It should never be given to children.

9. Does alcohol increase longevity? According to reliable statistics alcohol diminishes longevity.—*Med. Rec.*

GASTRIC ULCER AT THE MASSACHUSETTS GENERAL HOSPITAL, 1888 to 1898.—Grenough and Joslin (*American Journal of the Medical Sciences*) have undertaken a study of the cases of gastric ulcer which were treated at the Massachusetts General Hospital between 1888 and 1898. The statistics deal with 187 cases. Vomiting was the symptom most uniformly present, being absent in but four patients, and with the matter left doubtful in four others. The time of vomiting does not seem to be a factor in diagnosis, nor does the quantity of vomitus. Pain was definitely located in practically all the cases, though not always confined to one special area. In six instances only did the pain occur to the right of the median line. The pain followed the ingestion of food in 102 individuals, and was unrelated to meals in nineteen cases. In eighteen cases the pain was continuous. In fourteen cases there was no pain, and in fifty per cent. of this number the onset of the ulcer was with hemorrhage of a severe type, and three of these seven cases died. Thus it appears that those cases of ulcer in which there is no pain, as a rule, represent a grave type of the disease. The writers regard tenderness as a very indefinite symptom. That tenderness was absent fifty-one times is especially suggestive, because the patients were cases in which the

course of the ulcer was a severe one and the period of observation long. The following conclusions are drawn:

(1) Gastric ulcer is more frequent in Boston than in Chicago, Baltimore, Denver or San Francisco.

(2) It is five times as common in women as in men.

(3) The average age in men is 37 years; in women 27.

(4) Hemorrhage was present in 81 per cent. of the cases. It caused the death of 17 per cent. of the male patients, but only of 1.27 per cent. of the females. No woman under 30 died of hemorrhage during this period.

(5) The blood was that of a chlorotic type of anemia.

(6) Perforation occurred in 3.2 per cent. of the cases, and none of these patients left the hospital alive.

(7) Of 114 patients 80 per cent. were discharged cured or relieved, but at the end of an average period of five years only 40 per cent. remained well. The mortality at the same time (due to gastric disease) was 20 per cent. Among the males it was 30 per cent., with the females 9 per cent.

(8) The excessive mortality of ulcer among men, its occurrence in life a decade later than in women, and the absence of fatal cases of hemorrhage in females, point to a difference of the ulcer in the two sexes.

(9) The mortality of 8 per cent., and the failure of medical treatment to effect a lasting cure in 60 per cent. of the patients, indicates the need of surgical intervention in other than emergency cases of this disease.—*Ex.*

quent. The pain may be referred to the brow, temples, eyes or scalp. The general health of the patient suffers; inability to sleep is often present, mental vigor and memory become impaired and melancholia may follow.

Catarrh of the neighboring parts may complicate the nasal disease. Mouth-breathing causes a coated tongue, and this suggests dyspepsia to the careless observer.

Inspection of the nasal cavity assists the examiner in arriving at a proper diagnosis. Cocain is a valuable adjuvant in clearing up the cause of the headache in nasal disease.

If any disease of the nose of accessory cavities is found, same must be treated without delay. The eye not infrequently is the exciting factor in chronic forms of headache and should not be overlooked in trying to find the cause in such conditions.—*Laryngoscope.*

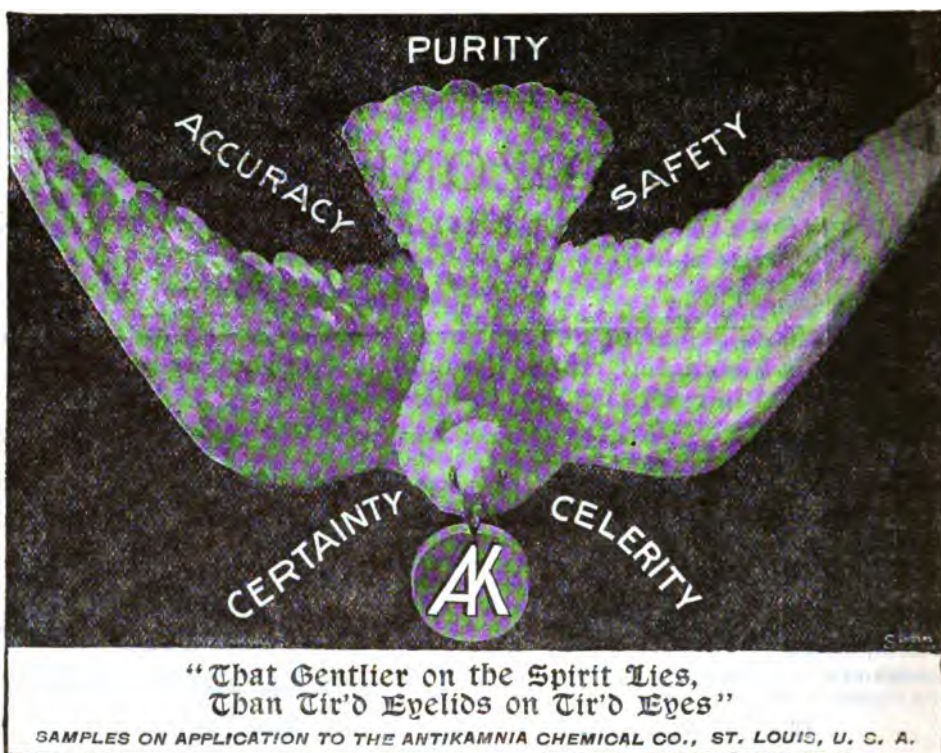
SOLID FOOD IN TYPHOID FEVER.—W. Buschew (St. Petersburg Med. Woch.) reports better results with a series of eighty soldiers with abdominal typhus, fed with bread, a chop, boiled meat, eggs, milk, tea, wine (one or two ounces), than with a series of seventy-four fed with liquid food. Since the introduction of solid food two years ago there has been but one death from perforation and two from generalized peritonitis out of 509 patients. There were no local complications from the solid food; the general health was less depressed and recovery more rapid.—*Rev. of Med. and Surg. Progress.*

HEADACHES, WITH ESPECIAL REFERENCE TO NASAL AND OCULAR HEADACHES.—A. D. McConachie, Baltimore, (*Mary. Med. Jour.*) says: There is no symptom of disease or functional disease which is so general as this affection.

All causes must be looked into. Each organ must be examined, and general causes eliminated, before local disease can be blamed.

Headaches of nasal origin usually begin intermittently; an acute coryza exaggerates the symptom. In a dry atmosphere the attacks are not fre-

RADICAL EXTIRPATION OF LUPUS.—Buschke (*Archiv. für Dermatologie und Syphilis*) who has employed radical extirpation in eighteen cases of lupus, agrees entirely with Neisser and Lang that all palliative methods are to be considered only when, for any reason, radical treatment is impossible. He believes it altogether inadmissible to use the so-called conservative methods of treatment before proceeding to extirpation, as the disease is thus given opportunity to assume larger dimensions and the tissues put in a less favorable condi-



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In Chicago during the months of November and December, 1898, and January and February, 1899, there were treated with Parke, Davis & Co.'s Antidiphtheritic Serum by the Antitoxin Staff of the Chicago Health Department 418 cases (microscopically verified), with 20 deaths—a mortality of 4.78 per cent.



DENVER MORTALITY

3.5 per cent.

In Denver during 1898 there were treated with Parke, Davis & Co.'s Antidiphtheritic Serum 230 cases, with 8 deaths—a mortality of 3.5 per cent.

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posure of front teeth in a case of peritonitis as we expected to find abdominal tenderness.

The spasmodic "grin," risus sardonius, was almost diagnostic of tetanus, and what skilled accoucheur could not determine the welfare of his patient by closely observing her facial expression?

In diseases of children, facial expression was of the utmost importance, and was entitled to special study and consideration. A non-observing physician would never be skillful in treating infantile diseases. To that physician lividity induced by exertion and excitement, with normal respiration, meant little, but the observing physician had learned that it indicated malformation of the heart and vessels.

Temporary lividity sometimes occurred in acute diseases. What did the congested cheek of the child mean? We all expected to find in such conditions a febrile or an inflammatory disease, as surely as we looked for cerebral disease in transient circumscribed congestion of the face, ears, and forehead.

Other diagnostic signs in cerebral diseases oscillation of iris, inequality of pupils, and drooping of upper eyelids. Dilatation of the *alæ nasi* during inspiration, with a contraction of the eyebrows and a countenance indicative of suffering, were associated with severe inflammation of the respiratory organs. Why did we anxiously ask the mother if the baby had tears during the act of crying? Because we had observed that the absence of tears meant a severe and probably a fatal prognosis.

In severe diarrhoeal troubles the rapid wasting of the features, causing deep suborbital depressions, prominence and pointedness of the cheek bones and chin, and hollowness of the cheek, were certainly too well known to need more than mention.

Hypertrophy of the brain was denoted by great expansion of the cranium above the ears, with but slight, if any, enlargement of the frontal portion.

If we were asked as to a prognosis in regard to an infant suffering from some cerebral or intestinal maladies, we should have no hesitancy in pronouncing a most un-

favorable prognosis were we to find a thick Meibomian secretion of a puriform appearance collecting between the eyelids.

Alteration of the face from facial paralysis, according to some writers, was of little account save for the pictorial effect; but when we stopped to think and remember the origin of the foramen of exit, the distribution and function of the cranial nerves, to his mind we need know little more for a correct diagnosis and prognosis. For example, in a case of facial paralysis the patient presented a striking condition. The right half of the face was expressionless; the wrinkles in the forehead were erased; the eye was abnormally wide open and possibly watery; the corner of the mouth drooped, and the patient was unable to completely close the eye, and complained only of tenderness and pain in the right ear; still, he was anxious to know if he would always remain paralyzed. What were we to do? First, ascertain the muscles involved; know the anatomy sufficiently well to give each muscle its respective nerve; then trace the nerve peripherocentrally through the substance of the parotid gland, the stylomastoid foramen, the aqueductus Fallopii, emerging through the meatus auditorius internus to its origin between the olivary and restiform bodies. But long before we got to its origin, we might discover in the region of the petrous portion of the temporal bone some trouble with the mastoid cell or some carious condition of the petrous bone. We should then have no difficulty in giving a prognosis.

Of course, in mild forms of facial paralysis, usually of a rheumatic type, the affection was usually referred to the facial muscles; but, as a rule, there was no difficulty in distinguishing between mild facial paralysis due to peripheral irritation and one of severe form where there was complete reaction of degeneration in the nerve and muscle. In connection with severe neuralgia, there might occur a contraction resulting in what has been called "histrionic spasm."

Dr. Ord's description of myxœdema was so full, and showed so clearly the importance of the study of physiognomy, that the author reproduced it *in extenso*:

The face, said Dr. Ord, was swollen in every feature, so as to suggest the existence of renal disease; the swollen skin was singularly waxy looking and anæmic, and the swelling affected dependent and non-dependent features equally. Thus the upper and lower lips were uniformly enlarged; the alæ nasi were thickened and broadened; the ridges of expression were blurred or coarsened, or the lines obliterated. The cheeks were overspread with a dull pink flush, abruptly limited toward the orbits, and standing in vivid contrast with the anæmic skin around. The face wore a fixed, heavy, and withal most sad expression.

If we would cultivate the faculty of observation more, Dr. Wiedemann said, we could sit in our office and read the diagnosis of almost all diseases on the physiognomy of our patients.—*N. Y. Med. Jour.*

THE THERAPEUTIC ACTION OF OREXIN TANNATE.—Dr. Golmer, of Erfurt (*Allgemeine medicinische Central-Zeitung, Therapist*), says that in cases of chronic pulmonary tuberculosis in children, the first thing that attracts the attention of the medical attendant is not the lung mischief, but the general feeling of debility experienced by the child. We first notice a general feeling of *malaise*, loss of appetite, and loss of flesh. It is observed that the face gets paler, the children don't care to play, they become apathetic and quickly tired, but it is only in weeks and months after these disturbances of the general health have appeared that it is noticed that on some spot in the thorax the percussion note is diminished as against the corresponding spot on the other half of the chest, and on auscultation bronchial râles can be distinguished, while the apices of the lungs are entirely unaffected. Meanwhile, the children get thinner and thinner, the paleness increases, and the general feeling gets worse. At the affected part of the lung the signs of consolidation become more marked, the percussion note becoming less distinct. If we can not succeed at this period in improving the nourishment of the child, the tuberculous process will gain ground,

extending to other organs, thereby accelerating a fatal termination. Care must be taken in our efforts to treat anorexia that the functions of the digestive apparatus are normally active, and in cases where a function is lacking, remedies should be applied in order to stimulate them or to get a substitute for them. Orexin tannate is a remedy suitable in the highest degree for improving the nourishment of tuberculous patients. It is an odorless, tasteless, yellowish-white powder, insoluble in water, but easily soluble in diluted acids. The author has had the opportunity of testing its efficacy in a number of cases, especially of tuberculous children.

The result was satisfactory throughout, the children taking the orexin tannate readily, and feeling very hungry afterward. For younger children he employed the orexin tannate chocolate tablets containing about four grains each. Two hours before dinner and supper the little patients took two tablets each time, fasting in the meantime. This medication was continued for five days; then an interval of three days took place in order to ascertain whether the appetite continued to be increased, and whether the patients increased in weight. The result was highly satisfactory.

Older children took the orexin tannate in powder form, three to four grains and a half, with a little sugar and water, two hours before meals, with the same result as to appetite and increase in weight. Besides this, Dr. Golmer employed the preparation in a number of cases of adult convalescents from severe feverish diseases, especially after inflammation of the lungs and pleura. At the beginning of convalescence the inclination for taking food was small, owing to the ability of the digestive organs being limited. Orexin tannate in powders of seven grains and a half each, given with a little sugar and water two hours before meals, effected in all convalescents an increase of appetite amounting almost to ravenousness, and increase of weight. In some exudations of a pustular or serous kind the improved nourishment caused by orexin tannate is almost a

cure. In all cases where it is a question of properly nourishing chronically tuberculous patients, the orexin tannate, the author considers, undoubtedly occupies the place of an important therapeutic remedy.—*N. Y. Medical Journal*.

CONTRA-INDICATION TO THE USE OF DIGITALIS.—It is growing more evident every year that a knowledge of the relation of the heart muscle to the work required of it, in any individual case, is much more necessary than to know what valve is diseased. As a rule, however, digitalis is not generally so useful in aortic disease as in mitral, as the prolonged diastole of digitalis favors the return of the blood to the heart. Nevertheless, when the heart muscle fails, and the hypertrophy is not compensatory, this drug can be used with good effect in both aortic stenosis and insufficiency.

The following case is an excellent example of the contra-indication to the use of digitalis:

The patient, who was a boy of fourteen, gave a history of three attacks of inflammatory rheumatism; one when nine years of age, one when twelve, and the third in May and June of last year.

There was pleural effusion during the first attack, and some pericardial effusion in the second. Recovery from all of these attacks was complete, so far as the joints were concerned. The present symptoms are shortness of breath and palpitation upon exertion, nose bleeding, headaches, while in school, and susceptibility in reference to catching cold. As rheumatism is now rather regarded as an infectious disease, we have here evidence of its extension to the endocardium, serous as well as synovial membranes being susceptible to its influence. The pericardium may also be involved, more rarely the pleura, and still more rarely the peritoneum. In exceedingly rare cases the cerebral membranes are involved. In this case the pericardium is adherent, as shown by systolic dimpling over the chest and Broadbent's sign posteriorly. The heart is very much enlarged, the pulse is receding. There is a pre-systolic thrill also a

on the right side. There are also systolic and diastolic thrills over the aorta.

There was, in this case, stenosis and insufficiency of both mitral and aortic valves. Compensation has been established, as is shown by the fact that the boy has been getting along perfectly well, unless he is called on to make any extra exertion.

In such a case as this no ordinary heart tonics are required; if digitalis is given, the rest afforded would increase the nutrition of the heart, and thus intensify the hypertrophy of that organ. The boy must be kept down to the level of his heart. His secretions must be regulated, simple diet prescribed, and no violent exercise permitted. Strychnia given occasionally in sixtieth of a grain doses three times daily, might be prescribed. During the winter months cod liver oil is clearly of advantage, especially if combined with the hypophosphites. No cardiac tonics, and above all no digitalis should be given.—*Massachusetts Medical Journal*.

CONGENITAL TUBERCULOSIS.—It has been so frequently stated within past years that tuberculosis as a disease is not inherited, that cases of manifestly congenital disease demand some notice. At the meeting of the Pathological Society of London, on May 2d last, Professor Macfadyen exhibited part of a tuberculous calf, making the third instance of congenital disease observed by him since 1897, prior to which date he had seen only one example. In the first case since 1897 there was advanced tuberculous disease of the maternal uterus; nothing was known of the condition of the mother in the second; and in the third the lungs were tuberculous, but the uterus was not examined. In the second calf the disease was present in the liver, spleen, lungs and myocardium, and in the third in the liver, spleen, kidney (to a slight extent), lungs and the lymphatic glands, hepatic, mesenteric, etc. Calcification was noticed in the second calf. In the adult bovine the lungs, pleura and peritoneum are usually infected, the spleen rarely.—*English Public Health*.

DEVICE FOR WASHING OUT THE PELVIS OF THE KIDNEY.—L. B. TUCKERMAN, in the *Cleveland Med. Gazette*, has devised a simple method of irrigating the pelvis of the kidney. It consists of a No. 6 French catheter, an ounce bulb and a common exploring aspirator with the ordinary three-way stop-cock, all connected by rubber tubing. The catheter is introduced in the ordinary manner through the Kelley speculum. It is necessary to use a stylet in the catheter, passing the catheter up as far as possible without force, then withdrawing the stylet a couple of inches, passing the catheter farther, and so on, until the pelvis of the kidney is reached; then by exhausting the contents of the pelvis of the kidney, they can be drawn into the bulb and inspected. From the amount of fluid which is drawn into the bulb we may judge of the capacity of the pelvis of the kidney. If pus, and it be deemed advisable to wash out the kidney, the bulb can be detached from the catheter, filled with boracic acid solution or such other disinfecting fluid as the practitioner may deem best, and, by reconnecting and reversing the stop-cock, the fluid can be injected into the pelvis of the kidney, again withdrawn, until, as in washing other cavities, the fluid comes away clear. To medicate the pelvis of the kidney, the bulb can be filled with the proper quantity of medicament, which in its turn is forced into the pelvis of the kidney, where it is left by the withdrawal of the catheter.

This device the author has used recently in the case of a woman afflicted with pyelitis, with the right kidney plainly palpable. The right ureter was occluded, or nearly so. In two sittings he succeeded in passing a catheter up to the pelvis of the kidney, and in the third sitting dilated the ureter to No. 8 French. From the pelvis he exhausted an ounce of pus, washed with boracic acid as above described, and filled the cavity with a one per cent. solution of ichthyol. At the next sitting the ureter was found unobstructed and the capacity of the cavity of the pelvis of the kidney reduced to about three drachms. The patient is a hopeless case so far as a cure is concerned, as microscopic examination of the pus

from both ureters shows tubercular bacilli, but she was improved after the washing out of the kidney. In a case of pyelitis of gonococcal origin, it seems rational to treat the pelvis of the kidney by flushing.—*Ex.*

THE BACTERIAL COMPLICATIONS OF DIABETES.—HONL (*Wien klin. Rundschau*) publishes an elaborate study of this subject, based upon twenty-nine necropsies. He finds tuberculosis by far the most frequent complication, occurring in 41.3 per cent. of the cases. Pneumonia and broncho-pneumonia were present in 24.1 per cent., and suppurative changes in the lungs in 20.6 per cent. He points out that diabetic tuberculosis may assume various forms, the most noteworthy of which is distinguished by extremely rapid destruction of lung tissue with the presence of very few of the specific microorganisms. Honl considers that it is due to bacterial symbiosis. In other cases, septic or pyemic processes may arise from the tuberculous cavities, and these may be traced sometimes to organisms which are very rare in human pathology. Thus the croupous pneumonia which occasionally complicates diabetes is apparently not in all cases due to the pneumococcus. One of the author's cases was what he describes as a pneumobacillary septico-pyemia, in which a general infection resulted from the diffusion of Friedländer's bacillus from the lungs. This is only the fourth case of the kind hitherto described. The author has also found it possible to elevate the immunity of certain animals against many infectious processes. Thus experimental phloridzin-diabetes raises the immunity of rabbits against Friedländer's bacillus.—*British Medical Journal.*

ALBUMINURIA IN DIABETES MELLITUS.—Herzog gives some interesting statistics as to the frequency of this symptom. It is to be remarked that only such cases are included where the albuminuria depends directly upon the diabetes without antecedent Bright's disease. Thus, in 1,200 cases of diabetes, Schmitz found albuminuria in 68.7 per cent. The occurrence

of albuminuria in diabetes is not necessarily a sign of nephritis. Although in post-mortems in cases of diabetes the kidneys are rarely found to be perfectly normal, the lesions may vary greatly. So long ago as 1881, Ebstein described a peculiar "necrosis of the renal epithelium" in diabetes, which has been confirmed by subsequent investigations. It has even been shown that the condition is sometimes found in artificially induced "phloridzin-diabetes" in animals. Hyalin and glycogenic degenerations of the loops of Henle have also been described. The prognosis of the diabetes is rendered more unfavorable by the continued presence of albuminuria, probably because after all in the majority of cases it rests upon an organic basis.—*Ex.*

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Notes and Comments.

THE TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE.—The Eleventh Annual meeting of this highly successful organization will be held in Chattanooga, Tuesday, Wednesday and Thursday, Oct. 24th, 25th and 26th.

Those desiring to read papers should send titles to the secretary, Frank Trester Smith, Chattanooga. The prospects are for a large meeting, and one of interest to the general practitioner.

In the warfare on microbes which of necessity forms so important a factor in modern surgery, too much care cannot be devoted to the ammunition. Pus must be removed or destroyed, its formation prevented. Alcohol in certain strengths is well known to be a very good germicide. Camphor and menthol also have their merits for this purpose. For some time a combination of these with hydrogen peroxide has been in use in the hospitals of Berlin, and has been found to be a superior antiseptic. The laboratory tests show marked results indicating that these solutions have a germicidal power exceeding what would be expected from the sum of the ingredients. Camphoroxol and methoxol, as these solutions have been called, not only

are powerful germicides, but harmless as well. They do not irritate they stimulate the growth of healthy granulations, and besides are very stable solutions which retain undiminished activity for a long time. Sterile gauze wet with a ten per cent. solution forms a neat and most efficacious dressing for any wound surface, and possesses the merit of being not only a powerful, but also a continuous antiseptic. As of minor importance perhaps it may be remarked that freely diluted with water they form a very pleasant, refreshing and efficient mouth wash.

THE INTERNATIONAL CONGRESSES OF THE EXPOSITION OF 1900.—First International Congress of Medical Ethics.—An important congress on Medical Ethics is to be held for the first time during the Paris Exposition of 1900, under the patronage of the French government. This congress should be carefully distinguished from the long established International Medical Congress or Congress of Medicine. The two associations neither conflict with each other nor do double work. For this reason, and for the convenience of members who may wish to take part in both Congresses, the dates of meeting have been so arranged that one immediately follows the other. The Congress on Medical Ethics will open its sessions on Monday, July 23d, and close the following Saturday. The Congress of Medicine opens on Thursday of the next week and lasts until August 9, 1900.

The French title of the new Congress aptly describes its scope—"Professional Medicine and Medical Ethics (Deontologie)." It is essentially a Congress of practitioners, and appeals especially to National, State and County Medical Associations. It will also concern directly professors of medical jurisprudence and all who are interested in the economic and ethical details of the profession. Besides the general and section sessions, important lectures will be provided. Only physicians and the legal counsel of medical associations are admitted to take part in the discussions as active members; their subscription fee is fifteen francs. The wives of active members and

medical students will be admitted to the sessions of the Congress on payment of a subscription of ten francs. Representatives of the press may ask for special admission cards. The meetings will not be open to the general public, and the section sessions will be held in the halls of the Medical Faculty.

The subjects of discussion will be divided up among the four sections:

1. Relations of the physician with the state and organizations depending on it, and the laws regulating medical practice; relations with organizations not depending directly on the state; medical service in respect to public assistance and charities, poor-law, public and private hospitals and medical charities; the position from the economic point of view of medical officers of health and other sanitary functionaries; relations of medical practitioners with the judicial authorities; and finally the utilization in time of war of the service of medical men who are no longer liable to military service.

2. Relations of the physician with individuals; with his patients, dispensing chemists, trained nurses, midwives, manufacturers of surgical appliances, etc.; questions concerning medical practice by unqualified persons.

3. Relations of practitioner with his medical colleagues (medical deontology); consultations, clinics and medical institutions, locum tenens, the sale of practices; relations between medical practitioners of different nationalities; professional medical societies and the formation of medical unions to defend the economic interests of the profession; other societies of medical men.

4. Questions relating to mutual aid and assistance among members of the profession, such as insurance in case of illness; a fund for old-age pensions, and help for the widows and children of medical men. The papers to be submitted to the Congress are of two kinds: Reports, which will be printed and distributed before the opening of the Congress (the manuscripts of these reports must be handed in to the committee of organization before January 1, 1900).

Communications (in French, Ger-

man or English) which should be presented to the committee in summary form before July 1, 1900. The words of the *London Lancet*, of May 6, 1899, may be applied to the United States: "This is an unique opportunity of placing on record an account of what has been accomplished in England, which would stand side by side with the descriptions of what has been achieved on the Continent and appear in the official report of the Congress, thus constituting a lasting and important page in the history of the medical profession." In Germany, the ministry which has medical affairs under its supervision, has brought the Congress officially to the notice of the various medical unions, which are to choose representatives authorized to speak in their name. The Brussels and Vienna faculties contribute important papers. The secretary general of the committee of organization is Dr. Jules Glover, 37 Rue du Faubourg Poissonniere, Paris.

Tenth International Congress of Hygiene and Demography. — The eighth section of this Congress is devoted to General and International Hygiene. It has chosen for its special study in 1900 the prophylaxis or preventive treatment of tuberculosis in army forces, both land and sea. The official reporters on the subject, Drs. Landouzy and Mosny, of Paris, have appealed for information to competent persons of good will in the different countries. Apart from answers to the systematic questions which they have prepared, they are anxious to receive printed or written documents in the matter, such as reports, the text of laws and proposed laws, orders and regulations, statistical and graphic tables, which concern tuberculosis and the frequency of the disease, the measures taken to combat it and the results obtained when such measures have been applied.

It is hoped that the labor which is thus undertaken by the International Congress may help to enlighten the different countries on the best methods of beginning a national struggle against tuberculosis.

The questions concerning land and sea forces of the army are divided into three groups:

1. Frequency, during the last decade, 1888-1898, of the mortality from tuberculosis—for each year the totals of forces actually under arms; of general mortality; of mortality from tuberculosis; of men discharged for tuberculosis. During these ten years has tuberculosis appeared more frequently or more rarely?—in land forces, artillery, engineering corps, equipage, cavalry, infantry, mountain troops, nurses, bureaux; in divisions collectively—army corps, garrisons, regiments, schools, hospitals, barracks and rooms, and in camps? according to grade, officers, non-commissioned officers, soldiers; according to date, men newly enlisted, or for several months under arms?

In sea forces, relative frequency of tuberculosis—among cannoniers, fusiliers, top-men or machinists? according to type of ship, wood or iron, ironclads, cruisers, transports, torpedo boats? special to certain ports? according to grade? according to date—men newly enlisted, after several months, veterans?

2. Preventive measures taken during ten years, 1888-1898: Recruits—regulations of examining boards in regard to men suspected of tuberculosis? application of regulations? During service—measures prescribed for men attacked by tuberculosis, discharge or isolation in hospital? Measures taken in infirmaries and hospitals; in barracks and camps; in military or naval schools on board ship?

Results of such measures—on total mortality from tuberculosis in army or navy? on general morbidity? On mortality or morbidity in collective divisions chiefly affected—army corps, garrisons, regiments, barracks, hospitals, schools—ships?

It should be remarked that this section work of the Congress of Hygiene does not duplicate the work of the Congress of Medicine proper, which occupies itself only with the scientific nature of tuberculosis (bacteriology), and with the pathology of the disease. The Congress of Hygiene is concerned with sanitation and preventive measures, both generally and from an international point of view.

The secretary of this section of the Congress is Dr. Ernest Mosny,

64 Rue de la Victoire, Paris, France.

The Thirteenth International Medical Congress.—The programme of The Thirteenth Medical Congress, which will be undoubtedly the largest and most important of the hundred or more Congresses officially recognized during the Exposition of 1900, has now been issued. The date of the Congress (from the 2d to the 9th of August, 1900) has been chosen so as to allow its members to attend, before or after, other allied Congresses of Practitioners (on Medical Ethics) and of Hygiene. The object of the Medical Congress is, moreover, exclusively scientific.

All doctors of medicine may become members of the Congress on payment of the subscription fee—25 francs. The French Committee and the other national committees may also present for membership scholars of a known reputation. The card of membership is necessary for sharing in the privileges of the Congress. Each member will have a right to the summary of the proceedings of the Congress and to the printed reports of the section to which he belongs.

The Congress has been divided into 25 sections arranged under five principal groups:

1. Biological Sciences—descriptive and comparative anatomy; histology, with embryology and teratology; physiology, with biological physics and chemistry.

2. Medical Sciences—general and experimental pathology; bacteriology and parasites; pathological anatomy; internal pathology; hygiene and medical pathology of children; therapeutics and *Materia Medica*; neurology; mental diseases; dermatology and syphiligraphy (which two also furnish the matter of a special Congress held separately).

3. Surgical Sciences—general surgery; children; urinary surgery; ophthalmology; laryngology; rhinology, otology; stomatology.

4. Obstetrics; gynecology.

5. Public Medicine—medical jurisprudence; military medicine and surgery; naval medicine; colonial medicine.

All propositions relating to the work of the Congress should be submitted to the executive committee

before May 1, 1900. Each Section Committee is charged with the organization of its own programme—hearing of reports, discussions of questions, various communications. The discourses pronounced at the two general assemblies and the section reports are to be published in the proceedings of the Congress. French is the official language of the Congress for all international relations; but, in the general assemblies, as well as in the different sections, German and English may also be used.

The following members from the United States have so far been designated for reports: Jacobi, New York, on artificial lactation and the use of sterilized milk; D. Bulkley, New York, syphilis and associate infections; Taylor, New York, causes of generalized infection in blenorragia; Ashurst, Philadelphia, radiography in the study of fractures and dislocations; Bradford, Boston, treatment of Pott's disease (beginning phase and formation of gibbosity); Christian Fenger, Chicago, conservative in renal retentions; W. White, Philadelphia, remote results of operative treatment of prostatic hypertrophy; De Schweinitz, Philadelphia, (ophthalmology) comparative value of enucleation and operations proposed as substitutes; Bosworth, New York, pathogeny and treatment of suppurated ethmoiditis; Montgomery Baldy, Philadelphia, surgical treatment of cancer of uterus; Lagardo, lesions from rifle balls of minimum calibre.

The president of American committee is Professor Osler, Johns Hopkins University, Baltimore.

CHLOROFORM VAPOR.—When the vapor of chloroform comes in contact with a gas flame, it is decomposed, forming a poisonous product known as phosgen or chlor-carbonic oxide. According to Dr. Schumburg (*Hygien. Rundschau*), this substance is broken up in the blood into hydrochloric acid and carbon monoxide, the latter being the cause of death. Since chloroform vapor has a high specific gravity, phosgen is formed in greater quantity when the gas flame is not much higher than the point of exit of the chloroform vapor; therefore when

artificial light is employed, the burner should be as high as possible above the operation-table. It is also important to have ventilators on the floor that will absorb the vapor.—*Medical Record*.

SURGICAL TREATMENT OF CEREBRAL SYPHILIS.—Friedländer and Schlesinger gives the following indications for interference: (1) Evidences of tumor persisting after antisymphilitic treatment, when said tumor is easy of access and of slight circumference. (2) When phenomena are progressive, in spite of specific medication, the patient's life being threatened. (3) Jacksonian epilepsy after antisymphilitic treatment, even when tumor symptoms have disappeared. They also give two contraindications: (1) When there is evidence of implication of the base of the brain or cord. (2) When there is present either amyloid disease or great impairment of vital force.—*Medical Review of Reviews*.

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Therapeutic Notes.

If you are interested in a portable electric instrument for use in your profession it would be an advantage to you to correspond with The Dow Portable Electric Assistant Co., as they have recently added several new attachments to their Assistant which have not as yet been put upon the market and are of great value, one being a cystiscope that is thoroughly lighted and so adjusted that the operator can work at the same time that he is viewing the parts. Another one is a small instrument for the use of an oculist especially, which concentrates the light on the spot under operation and to this instrument is attached a pair of small forceps. It is held in the left hand and leaves the right hand free for any other work. For the suggestion for this instrument they are indebted to Dr. Chandler, one of the leading oculists of Boston, who is now using it with success.

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CYSTITIS, THE CAUSE OF DISEASES OF THE URINARY ORGANS AND EMUNCTORIES DUE, POSSIBLY MORE OFTEN THAN IS GENERALLY REALIZED, TO THE PRESENCE OF URIC ACID IN THE URINE.

BY W. H. VAIL, M. D.,

Medical Examiner for Fraternal Mystic Circle, Philadelphia, Pa.; Assistant Editor *St. Louis Hospital Bulletin*; Visiting Surgeon to Mayfield Sanitarium; House Physician for Wm. Barr Dry Goods Co., St. Louis, Mo.

CYSTITIS is, as you well know, not a dangerous disease, but it leads to diseases of grave import, such as nephritis, prostatitis, urethritis, pyelitis, etc. This disease of the bladder, more frequent in men than in women, is a very common one to-day, agonizing and extremely irritating to the one afflicted. It is an inflammation of the mucous membrane lining the urinary bladder, acute or chronic in its course, and is either of a catarrhal, croupous or diphtheritic nature. It is characterized by moderate fever, rigors, frequent but scanty micturition, the urine containing pus, muco-pus, streaks of blood, giving it the appearance of pea soup, thick and creamy, hypogastric pain, severe vesical tenesmus, nausea and vomiting, prostration of strength, pain and sense of heat over the bladder. All these symptoms are familiar to every physician, and when he encounters them he knows that he has a case of this character with which to deal.

The causes of cystitis are many and varied. It may be the result of blows, bruises, kicks or wounds; from holding the urine too long; from urine that is irritating, being either

highly acid or alkaline; from the irritation of foreign bodies, such as calculus or gravel in the bladder, gout, Bright's disease, etc. In aged men it is said to result from an enlarged prostate, and in women to arise from inflammation of the uterus and pelvic cellular tissue. Exposure to cold, excitement or mental worry, also is said to create it, but more likely it is due to uric acid in the urine.

One of the prominent symptoms of this painful disorder is a constant desire to urinate, often with the inability of doing so, the process being often accompanied with a burning, smarting, stinging feeling in the region about the bladder. There is no harm in mentioning these symptoms although every experienced physician is as familiar with them as he is with his own name, but it may be a great help to many a young practitioner.

Acute Cystitis.—In this variety, the attack is generally sudden, and is heralded by chills, fever, inappetence, depressant feelings, frequent micturition, only a little urine being passed, which is of a fetid nature, the patient expressing a feeling of uneasiness until it is voided. This is followed by a distressing pain, the result of spasm of the bladder, a dull, but sometimes sharp and agonizing pain over the pubis and in the iliac regions. There is present a cold, clammy skin, a general malaise and complete nervous exhaustion.

Chronic Cystitis.—The attack in chronic cystitis is gradual and deceptive, excited by some hindrance to the evacuation of the urine, such as the appearance of stone in the bladder, stricture, or enlargement of the prostate gland. There is felt a dull pain, frequent urination, the urine passed being alkaline and containing

a large amount of pus. The quantity voided is small, but if the catheter is employed immediately after the emptying of the bladder, there will be noticed quite a quantity of cloudy, alkaline urine of a fetid odor, brought away and after standing awhile, a thick, adhering, tenacious sediment is deposited. Those afflicted with this form of cystitis generally portray great mental depression and constitutional debility. Acute cystitis is, as a rule, controlled by the cause, but chronic cystitis will continue for years, if not taken in time. It is incurable after the bladder has become hypertrophied.

A physician called to the bedside of one of these classes of patients comprehends thoroughly that these difficulties must receive prompt attention in order to abort more grievous issues. Rest in bed is absolutely essential and this he will enforce at once. In some cases he will apply ice-packs over the bladder; in others, hot poultices over which has been sprinkled laudanum. To allay the pain he will administer opiates and chloral, by the mouth. I have used Dover's powder, five grains every three hours, but where the pain is very severe, I give a hypodermic injection of morphine and atropine, repeated, if necessary. In the acute form, the catheter must be used twice a day, but the chronic form requires its employment several times in that length of time, after which the bladder should be deterged thoroughly with tepid or cool water of a medicated nature. To relieve the great turgescence, I have employed cupping and leeching with unusual benefit. It is a good plan to keep the urine diluted with large potions of some pure, reliable, alkaline mineral water, while the diet should be very nutritious, no highly seasoned food being tolerated. The most suitable nourishment in these cases is milk.

In the treatment of this disease, I have always used, in the homes, the fountain syringe water bag for giving injections into the bladder, but I always make it a point and never fail to administer rectal injections, for experience has taught me that these will often start the flow of urine when everything else failed. My

established medicaments in all these cases, from which I have obtained the most excellent results, are buchu, *uvæ ursæ*, *sanmetto*, *sodii borat.*, for I have learned from their use, that the urine becomes neutral, and alkaline to a slight extent and the vesical and prostatic irritation is assuaged, the mucous membrane is soothed and healed, the poisonous matter which is the cause of the inflammation of the bladder is removed, the congestion is subdued and the urinary effervescence prevented and where present destroyed. The persistent use of *sanmetto* throughout the case and for some time after convalescence, I have found very effectual, for it tends to prevent the accumulation of uric acid, and owing to its ability as a dissolving agent, softens and removes the gritty or solid concretions in the bladder or kidneys, and maintains the urine in a bland and healthy condition. Gouley considers the presence of uric acid in the urine to be the main cause of the most distressing cases of cystitis, and I, myself, have thought the same for some time. In short, it has been my belief that all inflamed conditions of the urinary tract or emunctories, whether acute or chronic, are not only aggravated by the presence of a superabundance of uric acid, but, many times, are the direct cause of it; and hence, owing to the properties of *sanmetto* mentioned above, it suggested itself to my mind, and has proven an effective remedy in these cases.

The analects gleaned from my investigations in treating cystitis covers an experience of a few years' standing, during which time, I have treated many cases, most of which bore grave complications, the result of dissipation, negligence, etc. This experience has taught me that to treat this disease and all the diseases of the environing organs and emunctories of the genito-urinary tract successfully, a physician must acquaint himself comprehensively with the drugs indicated and the effect which these same drugs produce, both physiologically and chemically, while a profound knowledge of the various forms and complexities of the diseases to be treated, their pathology and etiology, are of equal

prominence and should engage his prompt attention. After having selected the remedies suitable and requisite, modify them according to the indications, but remember, always, to temper the treatment with common sense, or as Opie, the famous English painter, forcibly admonished his pupil: "Mix your colors with brains."

A CASE OF TETANUS SUCCESSFULLY TREATED WITH ANTITETANIC SERUM.

BY P. A. HILBERT, M. D.,
MELROSE, MINNESOTA.

THE CASE that I wish to report was that of Johnnie B., aged twelve years, of German parentage, who had his feet scratched by fence wire, while helping his father, on June 17th. Five days afterward he complained of stiffness in the muscles of the neck and jaw and on the following day was unable to open his mouth wide enough to permit the introduction of the little finger. The boy complained of sharp, shooting pains which extended from his legs upward to the back of the neck. He was very nervous and sleepless, and had a temperature of 100.5° , the pulse rate being 110.

I was called in on the 23d of June, and at once recognized that I had to deal with a case of tetanus. I prescribed ten grain doses of chloral hydrate and telegraphed immediately for a supply of Parke, Davis & Co's. antitetanic serum, which arrived promptly on the 25th.

The muscles had become more rigid than they were at the time of my previous visit: the teeth were tightly set so that not even a toothpick could be introduced between them. Ten cc. of the serum was given at once and a second dose twelve hours later. A third dose of the same quantity was injected after a period of twenty-four hours.

The following day I observed a marked improvement in my little patient which steadily continued, so that in six days all rigidity of the muscles had disappeared and he was permitted to take substantial nourishment. The only alarming symptom that manifested itself during the period of convalescence was a very

irregular and frequent pulse. This responded readily to appropriate treatment and in a few days more the recovery had become so complete that the boy was able to drive a distance of twelve miles to town, with his father.

THE ASSOCIATION OF HYSTERIA WITH ORGANIC DISEASE OF THE NERVOUS SYSTEM.

BY PHILIP ZENNER, A. M., M. D.,
CINCINNATI, OHIO.

Lecturer on Diseases of the Nervous System in the
Medical College of Ohio.

Read at the meeting of the Mississippi Valley Medical Society held in Chicago, Oct. 2-6, 1899.

THE DIAGNOSIS of disease is the most difficult, and at the same time most important function of the physician. This is nowhere more apparent than in hysteria, a disease which may simulate almost any other, and where mistaken diagnosis may not only bring opprobrium upon the physician, but also do much mental and bodily harm to the patient.

The object of this paper is to call attention to the association of hysteria with organic disease of the nervous system, a not very rare occurrence, which enhances the difficulties of diagnosis, not the less so that the fact of such association is too frequently not borne in mind by the practitioner.

We view hysteria, now, from a standpoint differing from that of former periods. The name is no longer a term of reproach. Hysteria is looked upon as a disease, not a disgrace. Nor is it diagnosed nearly so frequently as formerly, where the case was likely to be pronounced hysteria because it was not known what else to term it. To-day the diagnosis hysteria is based upon the presence of well recognized symptoms. A large part of what was termed hysteria has been found to be organic, or other well recognized disease. The larger part is neurasthenia, a disease whose basis is nerve exhaustion. Hysteria, too, has as its basis, at least in many instances, nerve exhaustion, but the most important factor is the mental element. It is in large part a mental disease,

its manifestations the direct result of suggestion or auto-suggestion.

A most interesting question in this relation is that of simulation of disease. There is no doubt that the word of the hysteric is not always reliable, and some conditions—for instance, alleged blindness of one eye, where it can be proven that the patient really sees with that eye—seem very perplexing, yet it is generally conceded, to-day, that there is little conscious simulation in hysteria.

Let us dwell for a moment on the causes of hysteria, for it will help us to understand why it may occur with organic disease. The most important factor in etiology is heredity, though hysteria does occur without a neurotic history, and, apparently, even without the patients having formerly acquired a neurotic disposition. Among the not infrequent causes may be mentioned alcohol, syphilis, fevers and other debilitating conditions, trauma, shock and the depressing emotions. It is well to note that the same causes frequently produce organic disease of the nervous system. At the same time organic disease of the nervous system itself not infrequently causes hysteria. There are two factors that are especially effective here, fright or other painful emotional state that the actual disease evokes, and suggestion, the mental effect of present and anticipated symptoms. Let me add an instance of each.

Quite recently a young man came to me with locomotor ataxia. Only a few weeks before he had had the first intimation that he was not in perfect health, in the occurrence of a sudden diplopia. He learned from his physician that he was afflicted with a grave disease. The fright from this announcement brought on a marked hysterical mental state. It required strong assurances on my part that his condition was not as bad as he feared, and, finally, a modified rest treatment, to entirely remove the hysterical manifestations.

Another case of locomotor ataxia, a man in middle life, who had had pronounced symptoms of that disease a number of years, was seized with attacks of astasia-abasia—inability to stand or walk for a few minutes.

He continued to have such attacks for several months. They finally disappeared under the use of electricity, whose only influence, as applied in his case, could have been a suggestive one. The manner of the attacks and their cure, as well as the subsequent history indicated that they must have been of an hysterical character.

Apart from this fact of a sometimes common etiology, and therefore coincidence of hysteria and organic disease of the nervous system, the latter may appear in old hysterics, for hysteria is no security against such a development. In such instances the physician is often caught napping, for not only are the hysterical manifestations likely to mask those of a graver disease, but the practitioner is usually not on the alert for the appearance of the latter. I will add a few illustrative cases.

A lady, fifty-three years of age, had hysterical manifestations for many years, during which time I saw her in consultation at varying intervals. At one time she believed herself paralyzed. At another time she had not written for months, and believed that it was impossible that she could write until I gave her a firm order, when she did so in my presence, and seemed rejoiced to have the power. At another time she had the same apparent inability to read. She also had aphasic manifestations, at different periods. I have mentioned only a few of the many hysterical symptoms presented in the course of years. Apparently the hysterical disease had been the result of fright and suggestion. Before the hysterical symptoms appeared, she had some vertigo and headache, which her physician told her was due to a brain tumor, and that she had not long to live. Though future developments proved the incorrectness of the diagnosis, the idea was never altogether removed from her mind, and she was never again in a contented easy state of mind, her normal condition. This patient died of acute cerebral softening. The whole duration of her fatal malady was about six weeks. The symptoms were a very slow and steadily progressing paralysis, first in the arm, then in the leg, but never affecting

the face, gradually increasing mental obtundity, until toward the end there was profound coma, and, the last few days of life, high temperature. There were several areas of softening, the chief one affecting the upper two-thirds of the central convolutions of one hemisphere.

At the very inception of the fatal malady the patient had a pain in the arm, and declared that the arm was paralyzed, notwithstanding that the strength of the arm at this time and for several days thereafter seemed to be normal. She was at this time also in a very hysterical frame of mind, laughing, crying, etc.

The diagnosis of her physician and of myself in the beginning was hysterical paralysis, a diagnosis that seemed well founded, on account of the past history, the hysterical mental state, and the fact that a fixed idea of being paralyzed preceded the actual paralysis, as well as that the paralysis itself presented features to some extent characteristic of hysterical hemiplegia, the gradual onset of the paralysis, and its absence in the face.

The correct diagnosis was finally forced upon us by the portentous progress of the case, but, notwithstanding that all the symptoms seemed to point so clearly to hysterical hemiplegia, there is no doubt that we would have made a correct diagnosis at an earlier period if the trend of our thoughts had not been influenced by the long anterior history of hysteria.

Quite recently I saw a patient where a similar history led a large number of physicians astray. She had had hysterical symptoms of various kinds for many years, but her condition had been decidedly worse six or eight months before I saw her, though no other diagnosis had been made. She came to me from a long distance, and, as is my routine custom, a thorough examination was made, and Bright's disease detected. The patient died some months later. During that time there was such a commingling of hysterical symptoms and those of uræmia that it was often very difficult to determine the character of the manifestations presented.

The diagnosis in such instances may become a very perplexing prob-

lem. It is often sufficiently so in hysteria, which may simulate nearly every disease. As an instance I may state I have seen meningitis taken for hysteria, and hysteria taken for meningitis, and that, too, by good men. Nor is the diagnosis any easier than the hysterical symptoms are likely to be manifested in a part where there is already actual disease; in a joint that has been injured, or where there is a slight inflammation, in a larynx, where there is a mild catarrh, and the like.

In the diagnosis we will be assisted by noting: Firstly, the personality of the patient, age, sex, heredity, disposition and history; secondly, the relation of symptoms to emotional conditions, for hysteria, or, at least, some of its manifestations, may appear at once from fright, or other strong emotion; and subsequent symptoms may be influenced by like conditions; and thirdly, the clinical picture presented. The most characteristic clinical features of hysteria are the hysterical temperament—in the lighter cases the chief condition presented—the stigmata of the disease—anæsthesia, paralyzes, contractions, limitations of the visual fields, hysterogenic zones, etc., etc.—and the crises which vary all the way from severe hysterio-epileptic attacks to mere emotional storms. The diagnosis is sometimes helped by the peculiar grouping of symptoms, paralyzes, etc., such as it would appear organic disease could not produce, or by rapid fluctuations in symptoms, their sudden appearance and disappearance, etc. Finally, the marked influence or mental impressions, the power of suggestion over the manifestations of hysteria may throw a bright light on the nature of the disease.

There are some special symptoms that have a great diagnostic import, for instance the *globus*, and concentric contraction of the fields of vision for hysteria; and hemianopsia, alteration of the deep reflexes, rigid pupils, and the reaction of degeneration for organic nervous disease. Yet even these symptoms are not altogether pathognomonic, the first mentioned not at all, and hemianopsia, ankle, clonus, and rigid pupils have been found in hysteria.

The various diagnostic tests mentioned are not always found, nor are any of them invariably reliable. No wonder, therefore, that the most experienced and skillful diagnosticians have been led into error. The greatest safety lies in always bearing in mind that diagnosis is often difficult, that hysteria and organic disease may be present at the same time, and in a painstaking examination and careful observation of the case.

The importance of a correct diagnosis is often very great. We would avoid the opprobrium of calling organic disease hysteria. On the other hand we should not doom a case of hysteria by pronouncing it to be organic disease, a doom not only in name, but whose utterance may do untold harm to the patient. It is sometimes equally important that we should recognize the presence of each malady when both are present, especially because of the amenability of the functional disease to treatment. Not rarely, so far as the immediate condition of the patient is concerned, the functional trouble is the more important, and we have already seen that its appearance with organic disease is largely due to mental impressions, fright and suggestion. Hence the powers of the physician in combating it, by allaying fears, guarding against the ill effects of auto-suggestion incident to the organic disease, and inspiring the patient with new hope and courage. Here, as everywhere in the treatment of hysteria, awakening hope and cheer, and suggestive therapy are the most powerful curative measures.

BRONCHITIS.—

R Apomorph. hydrochlor., 0.03.
Morphinæ hydrochl., 0.02.
Acid hydrochlorici diluti, gtt. 5.
Syr. aurant. corticis, 15.

M. Sig. Take during the day.—
Neusser, Med. Rec.

ANALGESIC LOTION.—

R Atropinæ sulphat., gr. ij.
Morphinæ sulphat., gr. x.
Ac. oleici pur., ʒ j.

M. Sig. For inunction at painful spot. Cover with cotton and rubber tissue.—*Peoria Med. Jour.*

CONSTIPATION IN TUBERCULOSIS.

BY WILLIAM PORTER, A. M., M. D.,
ST. LOUIS, MO.

Professor of Physical Diagnosis and Diseases of the Chest at the Beaumont Medical College; ex-President American Medical Editors' Association; ex-President Mississippi Valley Medical Association; formerly Assistant at the Golden Square (London) Throat and Chest Hospital; Assistant to Sir Morell MacKenzie, etc.

(Extract from a Special Lecture in the 1899 Course on Physical Diagnosis at the College of Physicians and Surgeons, St. Louis.)

IN THE care of tubercular cases, there is one point that should always be insisted upon and that is that the lower bowel should never be allowed to become distended with fecal matter and partially digested particles of food debris. I can conceive of no better condition for the retention and development of bacilli than that which exists in a bowel so distended, the muscular fibres of which are weakened by distention, and the mucous membrane congested by the irritating substances retained.

In nearly all such cases of any chronicity, there is dilatation of the ascending and transverse colon, and dullness on percussion of the descending colon. The explanation is simple. Accumulation in the lower bowel with fermentation and retention of gas in the transverse and ascending tracts. Aside from the usual idiopathic sequelæ of constipation, there is the additional danger in tuberculosis of auto-infection from the bowel. I do not believe that we attach enough of importance to this, and yet the reasoning is logical from premise to conclusion.

The patient who is constantly expectorating tubercular matter will certainly receive more or less of it into the stomach, especially in the acts of drinking and food deglutition. The weak gastric digestion, so often present, does not greatly change the activity of the bacilli or the virulence of their ptomaines. These pass into the very tract where absorption is one of the main functions. Is it, then, an unreasonable proposition that much of the general mal-condition in tuberculosis depends upon this manner of auto-infection?

In these days when the subject of limitation of tuberculosis by sanitation is attracting so much attention,

it is but natural that our investigations should largely be in the direction of prevention of all outward sources of infection. It is right that the sputum should be mixed with germicides or burned. It is right that the milk and meat should be the objects of careful scrutiny. It is right that the individual should be protected against all danger of germ invasion from those who are already so affected, but it is also right that he should be protected against himself.

Were it not for auto-infection, I am convinced that most cases of tuberculosis would be more amenable to treatment. We can all recall cases in which a recognized tubercular condition was for a long time latent. Seeming improvement began. There was a gain in flesh, in strength, in appetite and in courage. Then an explosion occurred. The afternoon fever, night sweats, loss of appetite, irregular action of the bowels, all appeared and yet no tangible extension of the local pulmonary lesion. Does this not suggest auto-infection? The very fact that impaired assimilation is so early a complication in tuberculosis, is a fact that adds to the plausibility of this hypothesis.

Indeed, this deduction has come to be more than an hypothesis, it has all of the authority of a recognized fact. The physician who neglects this part of the treatment and permits the lower bowel to become a receptacle for the retention, increase and absorption of material containing so much active poison as the tubercular sputum—that physician must not be surprised, if in spite of his efforts in other directions, his patient steadily declines.

I cannot but think that some of the good results credited to creasote, guaiacol and other remedies of this class, are due to their immediate action in the intestinal tract, either as germicides or in rendering the condition of the intestine uninhabitable for the bacillus and in counteracting the influence of the ptomaines. It has now become my practice to order a high enema once or twice a week that the lower bowel may be well emptied and kept in as aseptic a condition as possible.

The same inertness may and I believe does prevail in the small intestine, notably just above the appendix and in some cases through much of the extent of the whole lower bowel. Here no enema can reach and yet a frequent evacuation is necessary, if the above noted conditions are present. Drugs that irritate, or have a marked drastic action are to be avoided. It has been the custom of many to give strychnia, aloin, etc., and yet it is manifestly wrong that a stimulant and whip, even when guarded by belladonna, should be used to urge to activity and compel action of muscular fibres already exhausted and weakened by distention.

It is much more rational, I take it, to give a mild saline after the lower bowel has been well emptied by the enema. For some time the phosphate of soda has been my favorite remedy, but it does not meet all of the indications, especially where there is the complication of lithæmia, or urine with excess of phosphates, as often found in tubercular cases. Moreover, it has been my experience that this agent loses its effect after a short time unless the dose is increased repeatedly.

More recently I have used with satisfaction, thialion, which combines the properties of a laxative salt with those of lithia. It has the additional virtue of acting upon the uric acid diathesis which so frequently hinders the recuperative progress and is so often a complication of faulty intestinal digestion.

Thialion performs a fourfold function, all of which tend to help the patient. First, it acts thoroughly on the bowels, increasing peristalsis; second, it relieves the torpid condition of the liver, increasing the flow of bile; third, it acts on the kidneys, increasing the quantity of urine voided; and fourth, it eliminates the uric acid from the body. I give a teaspoonful dissolved in a cup of hot water and drunk as hot as possible the last thing before retiring at night.

Since paying more attention to this phase of the treatment in tubercular cases, I have been able to largely reduce the amount of crea-

sote indicated and in many cases the reduction of temperature has been very noticeable, following the administration of enemata and the saline. Why not?

It must be remembered, however, that this treatment is not to be pushed too far. Frequent examinations of the abdomen by palpation and percussion should be made and the treatment regulated accordingly. The thialion salt should be given in small doses, well diluted in hot water and after the bowel has been well emptied. I prefer administering it at bed-time. This will not interfere in any way with gastric digestion.

I strongly object to the continued administration of salines, even when well dissolved and largely diluted, in close proximity to a meal in all cases of impaired gastric digestion. I know that experimenters have found in the laboratory, that the exhibition of some of the milder alkalies, stimulates the secretion of hydrochloric acid, but it must be remembered that such experiments are generally made upon organs with healthy functions. In cases where the alkalies—bicarbonate of soda for instance—do produce a better gastric action when given near the time of eating, I believe it is because of its reaction with the lactic and fatty acids.

Much of this I know is apparently direct opposition to the teachings of the physiologist and yet there is no real contradiction. Sherican Lea has shown that in natural gastric digestion, conditions are favorable for the rapid absorption of soluble salts, but we are not dealing with natural gastric conditions. Besides this, whatever of the salt remains unabsorbed, certainly neutralizes to some extent, the hydrochloric acid.

This may be a lengthy plea for so seemingly an unimportant proposition, but in caring for these cases nothing is unimportant—certainly nothing affecting digestion. Therefore, I repeat, that in all tubercular cases where a saline laxative is needed, it is better to give it at bed-time.

It is not by the use of any one agent—serum, creasote, tonics, diet, rest or what you will that we can confidently expect to cure, as we may now do, many cases of tuberculosis formerly considered hopeless,

but by a proper application of every method indicated. Of these I am sure the one above discussed is not the least.

BETA-EUCAIN AS A LOCAL ANESTHETIC.

BY GEORGE G. HAMILTON, F. R. C. S.,
ENG. AND EDIN.

Assistant Surgeon to the Royal Infirmary; Late Surgeon to the Northern Hospital, Liverpool.

FOR a considerable time past I have been trying various local anesthetics, but the results obtained by eucain "B" are by far the most satisfactory. With cocain one has always had the fear that cardiac or other dangerous symptoms might result. Then with eucain "A" or the first eucain which was used, the results were not at all reliable and the patients complained of much burning sensation or of absolute pain afterwards. In eucain "B" the surgeon seems to have in every respect a most satisfactory local anesthetic and when one thinks of the dread which many people have of chloroform or ether and of the number of deaths which are constantly reported in the medical journals as occurring therefrom, it is a great boon to be able to conduct even major operations and to assure the patients that at least there is no danger to life and no fear of suffering from sickness or other disagreeable after-effects.

Method of Administration.—I have gone back to a 2 per cent. solution in a number of hypodermic injections in preference to stronger injections (up to 20 per cent.) which were used at first. The 2 per cent. solution, if applied in the line of the cutaneous nerves supplying a part, paralyzes sensation over an area at least of the size of a five-shilling-piece, and this for the most part on the peripheral side from where the puncture has been made. For instance, if an operation is to be conducted on the skin of the middle of the thigh it is well to introduce the hypodermic needle in the line of the cutaneous nerves (middle internal and external) and two inches or so nearer Poupart's ligament. If an operation has to be performed on a finger the anesthetic should be administered in the neighborhood of the digital nerves, as

near as possible to the web and on the palmar surface. If the seat of operation is over the middle of the deltoid then the injection is made at a point near where the circumflex nerve winds round the outer side. The skin should be held tightly between the finger and thumb on the proximal side of where the injection has to be made; then a long hypodermic needle should be thrust into the subcutaneous tissue and from five to seven minims injected in two directions from one puncture. Three or four punctures are generally made, but if the patient feels at all another puncture should at once be made or some eucain solution poured over the wound. It is well first to explain to the patient exactly what is going to be done.

I generally use one syringeful (twenty minims) of the solution in three or four places and the syringe is again filled and used to moisten the wound or inject if necessary (forty minims in all). Anesthesia is produced almost at once, not in ten minutes, as has been stated, and no suppuration follows the injection if the needle is boiled and the eucain is prepared with boiled water. I have not yet been able to ascertain exactly how long the anesthesia lasts, but it varies very much—certainly it lasts half an hour in most cases.

I append notes of some of my cases which were operated on by the use of eucain "B," the notes being kindly taken by Dr. J. W. Anderson, for the most part at the time of operation.

CASE I. *Hammer-Toe*.—Injection of five minims of eucain "B" was made in the course of the digital nerves, one on each side of the toe. The lateral ligaments were divided subcutaneously. There was absolutely no pain.

CASE II. *Lipoma of the Back*.—Four injections of ten minims each were made around the growth and some liquid was poured on the cut surface. There was no pain.

CASE III. *Amputation of Finger at the Metatarso-Phalangeal Joint*.—An injection was made in the course of the digital nerves. The patient felt little pain during the amputation. In ten minutes the effect of the injections seemed to diminish and the introduction of the sutures was much

more painful than the incisions of the knife or the dislocation at the joint. The wound healed nicely and the patient expressed pleasure at the result.

CASE IV. *Hydrocele*.—The hydrocele was tapped and fluid was withdrawn. Ten cubic centimeters of 2 per cent. eucain "B" were injected into the sac through a trocar, followed by two drachms of the Edinburgh solution of tincture of iodine. The patient stated that the injection felt warm. Three days later the patient attended at the out-patient department and the sac was found to be thickened. There had been no pain after leaving the hospital. This is unusual, as the injection of iodine is extremely painful. He made a good recovery.

CASE V. *Umbilical Hernia*. The patient was a woman who was the subject of phthisis and cardiac mischief. The pulse was very feeble. Forty minims of eucain "B" were injected around and in the line of the tenth nerve and about forty minims were poured on the cut surface. No pain was experienced.

CASE VI. *Myxo-Fibroma of the Thigh*.—In this case forty minims of eucain "B" were used, being partly injected and partly poured on the cut surface. There was absolutely no pain. The patient stated that he had a sensation as if he were being rubbed with a blunt pin.

CASE VII. *Left Strangulated Inguinal Hernia*.—The patient was a man. Five minims of eucain "B" were injected in four places and twenty minims were dropped into the wound. There was no pain in the skin wound, but a little pain was felt when the tight sac was handled. The result was very satisfactory.

CASE VIII. *Thiersch Grafting*.—The patient was a very nervous old woman. Repeated injections of ten minims of eucain were made on the proximal side of the part where the skin was to be removed, fifty minims in all being used. There was absolutely no pain. Seven grafts, varying from one to two inches in size, were transplanted.

CASE IX. *Sebaceous Adenoma of the Axilla*.—Twenty minims of eucain were injected into the pedicle in three places and fifteen minims

were put on the cut surface. No pain was felt. The operation was begun within five minutes and the painless condition lasted for ten minutes.

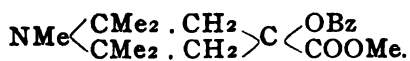
CASE X. *Fatty Tumor*.—A fatty tumor of the size of a filbert-nut (self) was removed painlessly from near the insertion of the deltoid after two injections of ten minims each.

Eucaïn costs 11s. an ounce and I have calculated that the expense of the solution for each operation is about 2d. The great advantage of not having chloroform sickness to contend with after the operation for hernia not only helps the patient to recover, but aids very much the diagnosis of whether or not the cause of strangulation has been relieved. The fact that a hydrocele can be cured by injections of iodine painlessly is very encouraging and Thiersch grafting can now be accomplished by the house surgeon in the ward, without disturbing other patients in any way.

It is my intention to try, in operations about the hands, injections into the neighborhood of the median and ulnar nerves in the forearm, for so far, although operations on the fingers are very satisfactory towards the tips, the amputation at the metacarpophalangeal joint was the least satisfactory. Lastly, my own personal experience of having a small fatty tumor (which I had possessed for fifteen years) removed without pain was most satisfactory in every way; I felt nothing, there were no after-effects, and the wound healed by first intention. Suppuration did not occur in any of the above cases.

Mr. Prosper H. Marsden, F. C. S., has kindly supplied me with the following information upon the chemistry of the local anesthetics mentioned above. Eucaïn was introduced some two or three years ago, by Schering, as a substitute for cocain. It was stated to be a methyl ester of benzoyl-oxy-piperidine carboxylic acid, having the formula $C_{11}H_{17}NO_4$.^{*} Merling when engaged on a research upon the close relations of atropin and cocain showed that ecgonin— $C_8H_{14}NO_3COOH$ —can be convert-

ed into cocain by replacing the carboxyl hydrogen by methyl and the hydroxyl hydrogen by benzoyl. Having regard to the analogy between amygdalyl-methyl-triacetone-alkamine and atropin the idea suggested itself that by effecting a similar introduction of benzoyl and methyl into y-oxy-piperidine carboxylic acid compounds obtainable by synthesis, products might be prepared which would resemble cocain in possessing the power of producing local anesthesia. The synthetic acids of this type were then unknown, but Merling found that they could be prepared by attaching hydrocyanic acid to triacetoneamine, saponifying the cyanhydrine so produced and in this way obtained acids analogous to ecgonin, and as ecgonin may be converted into cocain by successive etherifications and benzoylating, these synthetic carboxylic acids may, by substituting alcohol radicals for their carboxyl hydrogen, and benzoyl for the hydroxyl hydrogen, be converted into basic products which possess, in common with cocain, the property of producing local anesthesia. Eucaïn belongs to this class of compounds and is the methyl ester of a methyl-benzoyl-triacetone-alkamine-carboxylic acid as shown by the formula:*

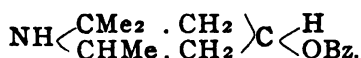


Recent observations indicating that eucaïn hydrochlorate has produced a burning sensation when applied to the eye have induced Silex to introduce a new compound of the same class which he finds to be better adapted for ophthalmic use. The name, eucaïn "B," is proposed for this substance to distinguish it from the older eucaïn, or eucaïn "A." Chemically, it is closely allied to the latter and also to cocain, and especially to tropacocain, but it is less toxic than either of the two last-named substances. Though the hydrochlorate of the new compound is less irritating it is in no way inferior in its anesthetic action to that of eu-

* Georg Merling: *Berichte der Deutschen Pharmaceutischen Gesellschaft*, Band VI., pp. 173-178. *Jour. of the Chemical Society*, 1897, Sept. A 1. 490. Translation in the *Pharmaceutical Jour.*, Oct. 17, 1896, p. 337.

* Year Book of Pharmacy, 1896, p. 180. From *Pharmaceutische Zeitung*, Band XLI., p. 279.

cain "A." The constitution of eucaïn "B" is represented by the formula:*



A. H. Peck, M. D., D. D. S., Professor of Materia Medica, Therapeutics and Special Pathology in Northwestern University Dental School, Chicago, after reading his paper, entitled "Relative Toxicity of Cocain and Eucain," before the Section on Stomatology, at the Fiftieth Annual Meeting of the American Medical Association, held at Columbus, Ohio, June 6 to 9, 1899, produced three guinea-pigs and injected them with Alpha-eucain, Beta-eucain and hydrochlorate of cocain, in doses intended to show relative toxicity with uniform results.

The first guinea-pig weighed $32\frac{1}{2}$ ounces, and one grain of hydrochlorate of cocain dissolved in twenty drops of water (a 5 per cent. solution) was injected hypodermically. In five minutes the guinea-pig fell over in convulsions which became tetanic in eight and one-half minutes. In nine minutes from the time of the injection the guinea-pig had ceased to breathe, dying from paralysis of respiration.

The second guinea-pig weighed 32 ounces. One grain of Alpha-eucain, dissolved in twenty drops of water (a 5 per cent. solution) was injected hypodermically as before. In five minutes the heart's action became very weak and respiration short and quick. In seven and one-half minutes from the time of the injection the guinea-pig jumped up from the table and fell in violent spasms, which continued for seven and one-half minutes, when the posterior extremities became paralyzed. The anterior extremities never lost their function. The heart and respiration were greatly, but not so much, depressed as by the cocain. The pig recovered in about an hour.

Guinea-pig No. 3 weighed nearly 28 ounces. Into this pig was injected three grains of Beta-eucain in twenty drops of water. The guinea pig apparently suffered no great inconvenience, except as was made known by grinding his teeth. The respira-

tion and heart's function were slightly depressed, but the guinea-pig recovered without spasms or other unhappy symptoms."

THE NON-OPERATIVE TREATMENT OF APPENDICITIS.

BY T. J. SHUELL, M. D.,
PARNELL, IOWA.

LEST the caption of my paper may be misleading, I wish to state at the outset that it is my opinion that fully developed cases of appendicitis are essentially surgical affections, and can only be cured by operative measures.

I wish to state, further, that in my opinion, there is no such thing as a medicinal or drug treatment of appendicitis, and that such treatment in the past has furnished as high a mortality as the cases left to the tender mercies of the *vis medicatrix nature*.

To explain what I mean by fully developed cases, I will say I mean those cases in which, by the irritation produced by foreign bodies or fecal concretions, assisted by pathogenic bacteria (whose entrance is favored by solutions of continuity in the mucosa, and whose virulence is augmented by the want of vitality in the area constricted by the inflammatory process), the present and future lumen of the appendix is rendered impervious; thus walling off muco-purulent deposits, which, therefore, seek an exit through the different coats, or tissues, of the appendix, at the point of least resistance.

If the constriction be very great, a gangrenous condition may result in a very short time, whose line of demarkation will be at the point of constriction. In this way we account for fulminant and gangrenous forms of appendicitis.

If the constriction be not so great, and will allow a certain amount of circulation in the walled off area, then there may result a muco-purulent deposit in the lumen of the appendix; which may, in time, be wholly, or in part, absorbed, leaving any solid matter entrapped; or the necrotic process may destroy the mucous, muscular and serous coats, resulting in localized peritoneal ab-

* Year Book of Pharmacy, 1897, p. 244, from *Pharmaceutisches Centralblatt*, Band XXXVIII, p. 355.

scuss, or general diffuse peritonitis with sepsis.

Kinks, or twists of the appendix, caused by muscular action or traumatism, are factors in obstructing the lumen, as well as foreign bodies or fecal concretions.

No one who has spent some months in our leading post-graduate schools, where appendectomies are performed weekly, can come to any other conclusion than that appendicitis, in its full development, is anything else than a surgical disease.

It is said, and probably almost universally believed, that the appendix is a functionless organ; that it is a rudimentary vestige which sustains the relation of an analogue to the large cecal pouch, found in herbivora and graminivora.

I am not good enough evolutionist to believe that Nature has done her work so imperfectly as to leave this "veritable death-trap" to man, her highest order of development, without giving it some use, or function, in the animal economy.

I believe that future physiological research will demonstrate a definite use for the appendix vermiformis.

The theory advanced by Sutherland, a few years ago, that it is the center, in the large intestine, for the production of leucocytes or lymphocytes, which take an active part in the destruction of micro-organism, seems to me very reasonable; also the theory advanced by some others that "Its use is to secrete a tenacious mucous, like the fauces and the rectum; and that such mucous lubricates the cecal pouch so as to facilitate the gliding on of the fecal mass, and prevent its impaction in the head of the colon."

If it be true that the appendix is a functionless organ, then why should we not push out farther than our progressive surgeons, who proclaim the dictum that all appendices should be removed as soon as the diagnosis of appendicitis has been made? If it be true that there are 50,000 deaths annually from appendicitis in our country, and that the death rate is practically *nil* when operated upon in the non-inflammatory stage (taking advantage of proper surgical technique and using the strictest aseptic and antiseptic precautions),

then why should we not resort to the proper prophylaxis, the enforced appendectomy of our children?

The Jews had their mark as a people, why should not progressive Americans? Then, in a bright and roseate future, when the soldiers of our great republic, in the face of shot and shell, shall plant the stars and stripes upon the ramparts of the Orient, let there be no doubt among the fallen, whom to inter with national honors, because they shall be lacking their appendices!

Appendicitis is not a new disease, though it has been known by various names throughout the ages. Some of the names by which it was designated are inflammation of the bowels, typhlitis, perityphlitis, pelvic abscess, peritonitis, etc. From statistics the mortality of this disease has varied from ten to fifteen per cent. Fitz places the mortality at fourteen per cent., in cases without operation.

A warfare has been waged for ten years or more, as to the comparative merits of the purely medical or purely surgical treatment of the affection, and the medical men have retired ingloriously from the field, when brought face to face with the pathological conditions revealed by the knife.

And yet, like Goldsmith's schoolmaster, "though vanquished, he could argue still," the medical man fires this last rejoinder: "Notwithstanding the perfection in the technique of appendectomy, and the trend of public opinion in that direction, and that thousands of operations are performed annually, yet a truthful array of statistics, derived from the length and breadth of our land, will show that the death rate has not diminished."

I believe this statement to be true. While the statistics of leading hospitals and post-graduate schools will show a lower death rate than the non-operative methods, and while the statistics of individual operators are surprising, yet the fact remains that they are not an index of the operative methods in general throughout our land.

The dictum promulgated by some of the radical exponents of the knife, that "all cases of appendicitis should be operated upon as soon as the diag-

nosis has been made," has had a bad effect in general, because it has been misconstrued and misinterpreted. It has been construed to mean that all cases of appendicitis *must be* operated upon to save life; it has been construed to mean that cases of appendicitis *may be* operated upon at any stage of the inflammatory process. It has been the beacon light that has led novices in the domain of abdominal surgery to enter where scientific surgeons would approach with misgivings and trepidation—that is, at the height of the inflammatory stage.

This is, you can easily understand, the opportune time for the novice, because, if the patient is not very sick he will not let the novice operate upon him, and if he gets better he will not let the novice operate upon him in the interval, but will seek some noted surgeon or go to some leading hospital. Therefore, the novice gets to operate at the height of the inflammatory stage, when death stares the patient in the face, and that, too, often with faulty technique, improper nursing and septic surroundings.

But the novice himself may not undertake to operate, but will stuff his patient with a goodly share of the drugs of the pharmacopeia, and at the height of the inflammatory stage will call in a consultant. While the consultant may wish that he were called earlier, or later, yet if he does not operate then, he will not feel like demanding so high a fee, and if he refuses to operate he may be assured that they will get some one who *will* operate. He, therefore, takes his chances and operates. We wonder that the results are often disappointing and disastrous, and that the death rate of appendicitis has not diminished.

The appendix is a diverticulum of the large intestine, which is attached to the posterior and internal face of the caput coli. It is usually about 4 or 4½ inches in length, and has a lumen varying in size from the diameter of a probe to that of a goose-quill. Histologically, the appendix consists of a mucous, submucous, muscular and peritoneal coat.

When the lumen of the appendix is unobstructed there is a constant

secretion of mucus poured into the cecum, and occasionally, as was observed by Binnie, of Kansas City, an appendicular passage of feces.

If feces are passed, they must have entered from the cecum. It is probable that liquid feces often enter from the cecum, which are again extruded by the vermicular action of the appendix, and cause no appreciable trouble. At times, however, hard fecal concretions or scybala are forced into the appendix by muscular action, sudden jolts, lifts or turns, when the muscular fibers at the entrance of the appendix are, as it were, taken off their guard. If these fecal concretions are extruded readily, by vermicular action, they produce but slight ailments; if not, they excite spasmodic action of the muscular coat, hyperemia, venous stasis and marked symptoms, known as appendicular colic. Hyperemia and venous stasis eventuate in constriction to a greater or less degree. Constriction may result in inflammatory changes or gangrene, and death of a part of the appendix.

The foreign body or fecal concretion may be in time extruded wholly, or piecemeal; yet the inflammatory process excited, may continue through the medium of pathogenic bacteria like the bacillus coli communis, streptococcus or staphylococcus, whose virulence is excited by the inflammatory action.

The evidence derived from a collaboration of the statistics of many observers goes to show that fecal concretions are found in more than one-half of the cases. The evidence furnished by autopsies, on cases dying from other causes than appendicitis, goes to show that one person in five has at some time had appendicitis, as shown by intra- and peri-appendicular lesions.

Premising this view of the etiology and pathology of appendicitis to be reasonable, and assuming it to be correct, I now wish to present what I believe to be a rational method of non-operative treatment.

I will not claim that this method will benefit all cases, or that it is new and original. But the arguments adduced in its behalf, you will nearly all admit, are unique. This method is proposed as being prefatory,

and supplementary to operative treatment.

It consists in thorough colonic flushings with very warm water, from every two to four hours, during the stage of appendicular colic, and the stage of hyperemia following thereafter, or for a period of from twenty-four to thirty-six hours.

This colonic flushing is best accomplished by means of a fountain syringe, connected with a flexible rubber tube, of about a number 20 catheter scale. The tube is passed up to the sigmoid flexure, or beyond it, and from two to three quarts of warm water are allowed to enter, slowly, by force of gravity.

This colonic flushing will, in my opinion, effect the following:

1st.—It will remove all fecal accumulations, and impactions from the ascending colon and cecum. Such accumulations, while often the result, are more frequently the indirect cause of appendicitis. They are indirectly the cause in two ways: (a) by acting as a ball-valve, and crowding the feces, as they enter through the ileo-cecal opening, into the appendix. The feces can't go back on account of the closure of the ileo-cecal valve; they can't go forward on account of the fecal accumulation, hence they seek the point of least resistance, which is frequently the lumen of the appendix; and (b) by the paresis they produce upon the muscular coat of the colon, which is transmitted by continuity of tissue to the muscular coat of the appendix, thus limiting its vermicular action.

2nd.—The alternate emptying and filling of the cecum and colon will have the effect of straightening kinks, flexures or twists of the appendix, because of its contiguity to the structures thus altered in shape.

3rd.—It will lessen the hyperemia and venous stasis of the appendix on the same principle that a vaginal douche will lessen the hyperemia of an engorged or sub-involuted uterus.

4th.—It will wash away debris and thickened mucus from the entrance of the appendicular canal, and produce regular instead of spasmodic vermicular action of the appendix.

5th.—In some instances it will effect a veritable washing out of the lumen of the appendix, thus ridding

the canal of foreign bodies, fecal concretions, inspissated mucous and pathogenic bacteria.

For its inhibitory effect on bacterial life the water may contain some weak antiseptic, such as boric acid.

I use no opiate, except where imperative, because opiates lessen peristalsis, a condition which I wish to regularly excite.

I use no cathartic, not even a saline, in the beginning, because cathartics disagree with the stomach, and excite peristalsis of the small intestines, thus forcing their contents into the already overloaded and parietic cecum and colon, and making matters worse generally.

If, after carrying out systematic colonic flushings for from twenty-four to thirty-six hours, there be no amelioration of symptoms, it will still be early enough to resort to operative measures. This statement will apply to all except fulminant cases, but I believe by following such method early, fulminant cases will rarely occur.

I believe that if this method be resorted to early, and carried out systematically, that there will be an amelioration of symptoms in from three-fourths to nine-tenths of the cases within thirty-six hours, and that few will require operative procedures. After this method, it is rare to have recurrences or relapses, because its effect is to render patent the lumen of the appendix and establish thorough drainage.

This is my presentation of the method, you will now ask what have been my results? In a series of twenty cases treated by this method, during the last four years, there was a prompt amelioration of symptoms within forty-eight hours in every case except one. That case I had not seen early. There was a tedious convalescence, followed by two or three relapses, and the case was finally cured by an interval operation. The lumen of the appendix contained a large, hard concretion.

The relief has been so marked and immediate after some one of the colonic flushings that I feel assured that the flushing dislodged the fecal concretion or obstruction.

Comparing these twenty cases with a like number in my practice in for-

mer years, treated by the so-called medical, or compulsory surgical methods, the advantage is much in favor of my more recent procedure. The medically treated cases of my former series had a tedious convalescence, and some of the operative cases resulted disastrously.

I will admit that such a small number of cases does not establish a rule, that I may have been fortunate in my run of cases, and that several of them might have recovered by the aid of the *vis medicatrix natura* alone, yet I still believe that my ideas are tenable, and that when a sufficient number of cases shall have been tested by this method that a valuable addition will have been made to the present treatment of appendicitis.

In conclusion I wish to say a word about the term "catarrhal appendicitis." I do not like the term. I believe it should be expunged from every text-book as a delusion and a snare. It offers a false sense of security. It impresses many with the idea that there is a benign form of appendicitis, when the facts in the case are that there is a difference only in degree, not in kind.

Any surgeon of experience will tell you that to-day he may find catarrhal appendicitis—that is, inflammation confined to the mucous coat of the appendix—to-morrow, an involvement of all the coats of the appendix in the inflammatory process, and on the following day, abscess formation and perforation.

Let us then never forget that we are dealing with the most serious disease of the intestinal tract. Thus far medicine has been of little benefit in its treatment, but I trust that a conservative surgery may, in the future, materially diminish its death rate.

—:o:—

INJECTIONS OF NORMAL SALINE SOLUTION IN DIABETIC COMA.—Roget and Balvay (*Lyon Méd.*) report the following case: A man, aged 20, was admitted to hospital on June 3d. He had had syphilis and ague and was addicted to alcohol. Five years before he had remained unconscious for some time after a blow on the head. On July 2d, he had several epileptiform fits. Though anasarca was present, there was no discover-

able cardiac or renal lesion. The urine contained a quantity of sugar. On July 23d, he had a fit, with deviation of the head and eyes to the left, and clonic spasms in the face, chiefly on the left side. On August 1st, the edema of the legs extended to the thighs; slight left facial paralysis; knee-jerks absent. August 2d, complete coma with epileptiform convulsions; urine scanty and had to be drawn off by a catheter. He was then treated with injections of normal saline solution, and received in all, between August 4th and 9th, nearly 14 pints, $3\frac{1}{2}$ of which were introduced directly into the veins, and the rest subcutaneously. Besides this he had three enemata containing $17\frac{1}{2}$ fluid ounces each. By these means free diuresis was established and the kidneys being sound, the poisons were probably flushed out through them. As soon as consciousness returned he ate with avidity and swallowed ten bottles full of alkaline water, containing in all nearly $1\frac{1}{2}$ ounces of sodium carbonate, which, doubtless, aided the process. On August 16th his condition was as good as it was before the coma appeared. He lived four months, and then died of empyema and phthisis. Post-mortem the pancreas was found to be partially absent. Towards the end there was pus in the urine, and calculi were found in the pelvis of the kidney, whose substance was found on microscopical examination to be perfectly healthy. The condition of the brain is not noted. The authors have been able to collect nineteen cases of diabetic coma treated by saline injections, mostly published in Germany and England; of these, only one, a case of Lépine's, recovered from the coma, but few or none appear to have received such copious injections.—*B. M. J.*

LIQUID AIR.—A. Campbell White, M. D., New York, after describing the properties and behavior of liquid air, and noticing the fact that it is not antagonistic to the lower forms of life and, therefore, is in no sense a germicide, gives results of his therapeutic experience with this agent. He has employed it in varicose ulcers, chan-

croids, and in some specific ulcers, and he believes, from the results of his experience, that we have nothing at our disposal that will so quickly, thoroughly and painlessly clear up the edges and stimulate the surface to granulation as does the proper application of liquid air. The applications should not be too frequent, as it is not desired to break down the new granulations. After one or two applications to a varicose ulcer, a repetition once a week is generally sufficient. A chancroid, or mixed sore, will be disposed of at one application, generously applied. A "beef-steak" chancre requires two or three applications three or four days apart. All ulcerations thus treated seem to do better with dry dressing instead of ointment. An ulcer, boil, carbuncle or bubo, in its early stage, is absolutely aborted with one thorough freezing. If more advanced, several applications, at intervals of twenty-four hours, are required. When pus has formed in large quantities, it is best to open under anesthesia, with this agent. In advanced bubo or carbuncle, it is unnecessary to curette if liquid air is thoroughly applied to the base of the abscess after incision. He has also used liquid air in sciatica, herpes, intercostal and facial neuralgia, obtaining permanent relief by applying the liquid air to the spinal end of the affected nerve. He thinks the prospects of the use of liquid air in lupus are very encouraging. As regards the treatment of carcinoma, he cannot express any positive opinion for want of experience. One reason why it acts so well he credits to its being a natural application. Air that is in liquid form is the same as the air which envelops the tissues normally, the only difference being its extreme cold, and the tissue destruction from its actual application is less than from handling the glass tube containing it. He applies it with the cotton swab or with the spray.—*Journal of the American Medical Association.*

MEMBRANOUS TONSILLITIS AND PHARYNGITIS OF INFLUENZA. — Dr. Rosa Engelman, of Chicago, read this paper, reporting a number of cases in which the presence of the

Pfeiffer bacillus had been demonstrated and yet the appearance of the exudation in the throat could not be distinguished clinically from ordinary diphtheria.

Dr. Rosenthal said that he had met with a few such cases and had noted that the exudation present in the grip cases could be distinguished from that of true diphtheria by its granular appearance.

Dr. Stevens, of Detroit, and Dr. Davis, of Pittsburg, took occasion, in this connection, to speak of the difficulties of diagnosing diphtheria, and of the discrepancies arising between the diagnoses of the clinicians and the bacteriologists.

Dr. Cotton declared that clinical diphtheria was a thing of the past, and that pure Klebs-Loeffler diphtheria was a rather rare disorder, though one quite amenable to treatment.

Dr. Engelman replied that many of the differences arising among the bacteriologists regarding the diagnosis of diphtheria could be explained by the fact that they had examined the different cultures at different stages. Some years ago she had seen and reported several cases in which intubation had been demanded, and yet the bacteriologists had been unable to demonstrate the presence of the Klebs-Loeffler bacilli. It was now known that these cases might have been examples of infection with the bacillus lanceolatus.—*Med. Rev. of Revs.*

ACUTE BRONCHITIS WITH DIFFUSE PAIN.—

R Ammonii chloridi,
Sodii salicylat., aa 3 ij.
Tinct. hyoscyami., 3 vj.
Mist. glycyrrhiz. comp., q. s.
ad 3 iij.

M. Sig. One teaspoonful every three hours.—*Herwirsch, Med. Rec.*

TO LESSEN THE DANGERS OF COCAINE INJECTIONS.—

R Resorcin, grm. 10.
Cocainæ hydrochl., grm. 20.
Aq. dest., grm. 100.

M. The resorcin diminishes the toxic effect, increases anæsthetic action and prevents the crystallizing of the cocaine.—*Hall, Ex.*

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Editorials.

THE PRESENT STATUS OF CÆSARIAN SECTION.

REPORTS from the Amsterdam Congress seem to confirm the opinion at present entertained in this country regarding the value of the above operation.

In past years Cæsarian section, with its high mortality rate, compared most unfavorably with other methods. But this is not the case to-day, for with improved technique and aseptic details the mortality of the operation has dropped to about 8 per cent., so that it cannot be regarded as a particularly formidable procedure, as regards either mother or child.

The operations with which it comes into competition are: Premature labor, whose sphere is a somewhat limited one and which implies a high infantile mortality: Symphyseotomy, which in exaggerated degrees of pelvic deformity is out of the question and which in the hands of the best operators shows a moderately high maternal mortality and an infantile death rate of about 15 per cent. And lastly craniotomy, which in addition to its other objections is not without considerable danger to the mother.

Popular opinion and religious teaching have ever been arrayed against the latter procedure, and under present conditions its opponents maintain a stronger position than ever before, for they are now

receiving the endorsements of a considerable portion of the profession.

Experience and statistics adduced from a very large number of cases have established the fact that Cæsarian section is adapted to the largest number of cases, and in many instances, is the only operation to be employed. According to the tables, it is safer than symphyseotomy both for mother and child, for the mere separation of the pubic bones is oftentimes only a feature of the operation of extraction and hence cannot in itself rank as a very scientific or effective procedure.

For cases of non-viable children near the end of pregnancy the Cæsarian operation offers the mother a good chance of life and the child an equal one, the mortality in both being considerably under 10 per cent. Hence in some communities, at least, it will undoubtedly become, after a time, the favorite method of procedure, especially in hospital practice.

QUARANTINE AGAINST PHTHISIS.

AT a recent meeting of the California State Board of Health it was voted to institute rigid protective measures against infection by tubercular cases. These will consist in the exclusion of all such from all public gatherings and their transportation under special sanitary precautions.

California is one of the favorite resorts for such invalids, it being estimated that nearly 20,000 of these visit the state each year in the pursuit of health.

While a few recover and some improve, it is at the expense of the state, for they form numerous foci of infection and no doubt transmit the disease to many of those with whom they come in contact. This fact has now become recognized and a town which acquires a high reputation for salubrity is in most cases doomed, and becomes in time a sort of hospi-

tal-camp which the average tourist has no desire to visit.

While the necessity for such climatic resorts is recognized, the public health should not be endangered thereby, neither should the welfare of a state be jeopardized by the influx of undesirable citizens. This evil can be remedied only by rigid isolation and the enforcement of special sanitary rules.

This action is both timely and important and should be copied by the health authorities of the western and southern states, which are more exposed than most others to the dangers of such infection.

JUDGE BALDWIN'S ADDRESS.

THAT WAS, indeed, a strange doctrine enunciated by Justice Simeon E. Baldwin, of Connecticut's Supreme Court, in the address delivered by him on the evening of Sept. 4th, at the opening of the session of the American Association of Social Science, at Saratoga; his topic being "The Natural Right of Man to Death." The gist of the learned judge's argument was, that when a person is mortally ill it is wrong for physicians to prolong his life, and such practice should be made illegal. Among other things he said:—

"There are certain maladies that attack the human frame which naturally end in a speedy death, but may be so treated as to lead to a protracted state of weakness and suffering incompatible with any enjoyment of life or useful activity, and from which there can be no reasonable hope of ultimate recovery. * * * Nature has kindly smoothed the sufferer's pillow by leading the way to that gradual exhaustion of the vital powers which follows the refusal of the stomach to receive or digest food. To force nutrition into the system in such a case through other channels is simply to prolong a useless struggle at the cost of misery to the patient and to the profit of no one but the doctor and the nurse. * * * A natural death, coming in ordinary course, may be

the divine way of calling one up from a condition of existence to which he is unfitted, or in which he is not needed, to one in which he is needed and needed at once. To postpone it, to protract a life by medical skill beyond its seemingly appointed bound, may, looked at in this light, risk the loss of a fitter place in a larger life—the loss of a God-given opportunity."

More than one statement in the foregoing extract betrays the speaker's profound ignorance of the important subject of which he treats. He has, evidently, at some time or other, witnessed one or more death-bed scenes of the harrowing character he describes, and has in consequence of his narrow experience formed some very strange notions regarding the nature of death and disease and the duty of the attending physician. He believes that man has a natural right to die and that death is "a God-given opportunity." But the antithesis is equally true, that man has a natural right to live and that death is a *loss* of a God-given opportunity. He declares that certain diseases "naturally end in a speedy death," that such "is the divine order of things." This is indeed a dangerous doctrine of social science. The judge should know that disease is not natural, is not "the divine order of things." Death, it is true, is natural, but disease and death are two entirely different things. Disease is *unnatural*, is the result of disobeying nature's laws and "the divine order of things," and it is the bounden duty of every physician to become the intelligent handmaid of this same nature in her effort to restore health and prolong life.

The pertinent question may be asked Judge Baldwin, who is to tell when life has reached its "appointed bound?" Who is to take the responsibility of deciding when death is inevitable? Certainly no reputable physician. A century ago there were many so-called "incurable dis-

eases." To-day there are but few. Who can say that there will be any a century hence—provided, of course, it is not made illegal for the physician to strive to do his best.

VITAL STATISTICS IN THE TWELFTH CENSUS.

PHYSICIANS and students of mortality statistics will be interested in learning of the work now being accomplished by the chief statistician of vital statistics of the United States census, under the authority of the director, Hon. Wm. R. Merriam, who is making a practical effort to secure the adoption of a uniform certificate for the return of deaths and thus establish a common national system of collection of vital statistics for the purpose of the census tables and publications. Hitherto, as is well known, much unnecessary and objectionable variation in the form and manner of official returns has existed throughout the country.

Mr. William A. King, the chief statistician, has already had correspondence with nearly all registration officers of the several states, and has received courteous and prompt assurance of their willingness to co-operate with him in the proposed work. A model form of death certificate was prepared and submitted to each registrar who has agreed to urge its adoption in his district.

The result is very gratifying to the census office, for not only have the items in the specimen form been very generally approved and adopted, but many practically obsolete variations in local certificates have been abolished and the latter made to conform to one standard more nearly than ever before. The benefit that will result to the census office and to science from this first step toward the goal of national uniformity is incalculable and it will be readily seen that the study of the natural law of the growth of the

population is made easier and more certain.

In order, however, for the movement thus inaugurated to bear fruit, it is necessary that physicians everywhere should appreciate the desirability of the new order of things, and that they should earnestly and actively co-operate in securing prompt and accurate mortality returns of the uniform character required by Congress and sought for by statisticians, for any failure on their part to give vitality to the common standard by carefully reporting the items that may be new to their certificate, will be fatal to the end in view. Upon the medical fraternity of the United States, therefore, more than upon any other agency involved, depends the ultimate success of the project, inasmuch as a prompt, full and correct return upon the new death certificate is the chief essential.

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Book Notices.

CHRISTIAN GREECE AND LIVING GREEK.
By Achilles Rose, M. D. New York City. Peri Hellados Publication Office. 1898.

In the pages of this book the author has given in a most interesting and scholarly way all that is most important regarding modern Greece, in its political, social and literary aspects. Its reading will prove something of a revelation to those who have not followed closely the history of that nation, and the records of a systematic oppression which has existed for a great many years, and which even now is very much in evidence. No one can fail to be interested in the story of her struggles for independence so graphically told by one of her people. The use of Greek as an international language is earnestly advocated and the arguments presented in its behalf will no doubt prove convincing to most of those who carefully read the work. The fact that this language has preserved its integrity for so many centuries and is now spoken in its original form and inflection by nearly

7,000,000 people, offers strong evidence of its vitality, as well as of its beauty and adaptability. The popular method of teaching it as a dead language, however, is greatly deplored, and in this connection some valuable suggestions are offered regarding the acquirement of this and other modern languages. That the same are thoroughly practical is indicated by stating that the author is himself a well known linguist as well as a most scientific physician. The work has already met with a large sale and has elicited flattering criticisms from many foreign journals. A German version will be published in Leipzig this month and a Greek translation will appear in the near future. We commend this volume without reserve to students generally, but to the medical profession in particular, who will find therein much that is valuable and suggestive.

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Current Literature.

"Reflex Cough," by George L. Richards, M. D. Reprinted from the *Medical Record*.

"Progress in Gynecology," by Chas. P. Noble, M. D. Reprinted from the *Maryland Medical Journal*.

"The Address in Surgery," by William B. Coley, M. D. Reprinted from the *Montreal Medical Journal*.

"Carcinoma of the Duodenum," by Charles D. Aaron, M. D. Reprinted from the *Philadelphia Medical Journal*.

"The Other Side of the Antitoxin Question," by J. Edward Herman, M. D. Reprinted from the *Medical Record*.

"Empyema of the Gall-Bladder," by J. E. Summers, Jr., M. D. Reprinted from the *Western Medical Review*.

"Rubber Gloves or Gauntlets, Their Use by Physicians and Surgeons," by J. E. Summers, Jr., M. D. Reprinted from the *Journal of the American Medical Association*.

"Alexander's Operation," by Chas. P. Noble, M. D. Reprinted from the *American Gynecological and Obstetrical Journal*.

"True Conservatism in Gynecology," by Charles P. Noble, M. D. Reprinted from the *Pennsylvania Medical Journal*.

"The Failure of Antitoxin in the Treatment of Diphtheria," by J. Edward Herman, M. D. Reprinted from the *Medical Record*.

"The Advance of Medical Education in the United States," by Franklin Staples, M. D. Reprinted from the *Northwestern Lancet*.

"The History of the Early Operations for Fibroid Tumors," by Charles P. Noble, M. D. Reprinted from the *American Journal of Obstetrics*.

"Operations During Pregnancy," by Charles P. Noble, M. D. Reprinted from the *American Gynecological and Obstetrical Journal*.

"Nephro-Ureterectomy for Traumatic Hæmato-Hydro-Nephro-Ureterosis," by John E. Summers, Jr., M. D. Reprinted from the *Medical Record*.

"The Facial Nerve in its Relation to the Aurist," by George L. Richards, M. D. Reprinted from *Annals of Otology, Rhinology and Laryngology*.

"Hydrochloric Acid, Simple Method of Administering," by Charles D. Aaron, M. D. Reprinted from the *Journal of the American Medical Association*.

"The Diagnostic Value of Abdominal Palpation in Diseases of the Intestines," by Charles D. Aaron, M. D. Reprinted from *Mathews' Quarterly Journal*.

The Living Age, for Sept. 30, will have for its leading article the last contribution which the lamented M. Victor Cherbuliez made to the *Revue des Deux Mondes* over his familiar signature "G. Valbert." The subject is "The Colonial Principles of an

American Naturalist." In the following number of *The Living Age* will be printed M. Ferdinand Brunetière's funeral oration over M. Cherbuliez.

Lady Broome's "Colonial Memories," now appearing serially in the *Cornhill* and *The Living Age* are bright, good-humored and entertaining in an unusual degree.

Miss Frances H. Low's "A Woman's Criticism of the Women's Congress," in *The Living Age* for Sept. 23, will be read with lively interest by conservative and "advanced" women.

"Circumstances Under Which Chloroform is Preferable to Ether as an Anesthetic," by George W. Gay, A. M., M. D. Reprinted from the *Boston Medical and Surgical Journal*.

M. Jules Claretie's recent lecture on "Shakespeare and Moliere" is published in full in *The Living Age* for Sept. 16. It is an extremely interesting appreciation and comparison of the two great dramatists.

The story of "Dame Fast and Petter Nord," now running as a serial in *The Living Age*, gives American readers their first opportunity to become acquainted with the brilliant Swedish writer, Selma Lagerlöf, as a writer of short stories. "Dame Fast and Petter Nord" is a quaint story, with a suggestion of Hawthorne in its style and theme. It is translated for *The Living Age* by Dr. Hasket Derby.

THE "NEW LIPPINCOTT" MAGAZINE FOR OCTOBER, 1899.—The complete novel in the "*New Lippincott*" for October is called "Love Across the Lines," by Harry Stillwell Edwards. It is a story of the war in Virginia, in the vein of Captain King, but with a difference. A unique marriage ceremony in a dark room between a man and woman who meet then for the first time, opens the story and the original and ingenious plot sweeps on to a strong climax so convincingly related that the reader spontaneously laughs and weeps

with the fetching heroine in her joy and misery. It is a striking and powerful tale from a pen which has already won applause in short fiction.

In a brilliant article in the "*New Lippincott*" for October, I. Zangwill has expressed his sage but fantastic views on "Zionism."

Beside "Love Across the Lines," the complete novel, by Harry Stillwell Edwards, in the October number of the "*New Lippincott*," there are some remarkably good short stories contributed by pens too well known to need more than passing mention, to compel attention. Paul Laurence Dunbar has written a slave story in his very best vein of humor and pathos, entitled "The Strength of Gideon." "The Journey's End," by Beulah Marie Dix, is a dashing tale of Roundhead Times, characteristic of the author of "Hugh Gwyeth" and a brief humorous sketch by Cy Warman, called "Ar' Ye Woth It?" possesses his rare trait of homely fun.

A thrilling description of "The Biggest Little Fight in Naval History," by George Gibbs, is the second article on Naval Fights by this writer. It deals with Decatur's fight in the harbor of Tripoli.

The author of the charming "Kitwyk Stories," now Mrs. John Lane, writes lovingly of "Gilbert White of Selborne;" accompanying the paper are several quaint illustrations by Edmund H. New.

"The Common Insects of Autumn," by Belle S. Cragin, tells just what people like to know about the habits and haunts of our little neighbors. A brilliant member of the smart set in London, under the pen-name "Ignota," gives some new, interesting and seasonable facts about English high-life and hunting, in a paper called "Scottish Sport and Autumn House Parties."

The verse of the month is contributed by Samuel Minturn Peck and Clinton Scollard.

The October number of *Self Culture Magazine* presents a handsome portrait of Admiral Dewey and the Table of Contents displays a list of articles that will please all classes of readers. The illustrated papers are delightful by the super-excellence of

the engraver's work, the plates having a clearness that is not surpassed by any other magazine. An account of the life and struggles of Dr. Gatling, of gun-making fame, is quite pathetic in its description of the failure of his last experiment with gun-casting. The "Social Salons of our National Capital" continues the series of beautiful illustrations begun in the September number under the title of "Homes of the Diplomatic Corps at Washington."

"The Omaha Indian Congress" portrays sham battles participated in before white people by former warring tribes, many of whom were hereditary foes and gives portraits of several of the principal chiefs. The work of the Armour Institute of Technology, at Chicago, is described in an interesting paper, and the library and laboratories are illustrated with fine, clear half-tones. Excellent portraits of Philip D. Armour and Dr. F. W. Gunsaulus are also given in this article.

Other illustrated articles are "Twenty-five Years of Johns Hopkins University;" "In Love's Dear Thrall;" "The Old Missions of California;" and "Chattanooga and Chickamauga."

A lucid description of "Liquid Air, its Nature and Possibilities," is of very timely interest; "The Truth about the Philippines" gives some personal experiences in "our new possessions;" and every housewife at this season will be interested in reading how fruits and vegetables are preserved in "Maryland Cans and their Contents." A brief review of "The Century's Achievements in Business," deals with the Department Store, Trusts and Syndicates, Commercial Honesty, Advertising and other prominent features of commercial life, and the Editorials, as usual, treat topics of current interest in the usual brilliant style. "Woman's Invasion of Man's Province as Bread-Winner" will provide subjects for discussion by the Women's Clubs of the country.

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VEHICLE FOR THE IODIDES.—Coffee is an excellent vehicle for the administration of the iodides of potassium and sodium.—*Ex.*

Correspondence.

HEALTH HINTS FOR THE PHILIPPINES.

Editor New England Medical Monthly:

As many of our young men now joining the volunteer regiments being raised in the States will see service in the Philippines, it is not far fetched to call their attention to a few matters of personal interest, the careful observance of which will keep many of them in a state of good physical condition, who otherwise would be a burden to themselves and their comrades.

1. Don't think you are going to be ill.
2. Don't become careless because you think so.
3. Drink only boiled water cooled in an oyer—let ice go.
4. Wear cotton clothing in daytime, your flannels at night, and keep cool and warm during these respective periods.
5. Sleep in a suit of pajamas, a flannel abdominal binder, and a pair of woolen socks. Night shirts work up too high.
6. Eat ripe fruit and observe the Spanish maxim when eating it:—"Fruit in the morning is golden, silver at noon, and lead at night."
7. Eat fresh vegetables, and masticate them thoroughly; as many sweets as the system craves, which is considerable—little meat, you will not care for it.
8. Avoid the sun as much as possible, especially between the hours from 11 to 3, and if forced to be in it, wear a cork helmet thoroughly ventilated in the crown, and around the inner band—the natives use umbrellas constantly.
9. Whiskey, wine and beer, say what they may, are as so much poison to even the strongest men.
10. Bathe all over twice a week—but sponge the body thoroughly with warm water every morning—don't bathe at night, and never use water from which the chill has not been taken.

11. Take regular daily exercise of whatever kind you most fancy, take it during the cooler hours of the afternoon.

12. When you feel the first prodromal symptom of intestinal activity, take a good size dose of castor oil or rochelle salts, diet on toast and tea, and keep perfectly quiet for twenty-four hours.

If one will observe these rules studiously, it is fully as easy a matter to be healthy in the far East as it is in the United States.

Waller H. Dade,

A. A. Surgeon, U. S. Army.
Meycauayau, Philippine Islands.

WHO KNOWS?

Editor New England Medical Monthly:

What of this Goats Lymph, said to be a cure for some forms of insanity, also for locomotor ataxia, rheumatism, paralysis, nervous diseases? I have talked with a gentleman here, of Detroit, Mich., who says he was cured by it of chronic chorea (Huntington's) of many years duration, in about four weeks treatment; also that he knew three or four cases of locomotor ataxia which were cured by it. I saw the statement in a Jacksonville paper that a gentleman of Joliet, Ill., confined in Kankakee Asylum as a hopeless lunatic, was cured by it and is now back to his business.

Dr. B. F. Roberts, the reputed discoverer, was of Greene City, Mo., but now gone to Europe to confer, it is said, with Prof. Koch.

Whatever may be the merits of the so-called Roberts Goat Lymph, it is being exploited in a most unprofessional way. Licenses to use it are issued for \$100 to one physician in a locality, who must pay three cents a drop for the lymph and give the promoters, or company, or whatever it may be, one-third of all his earnings in using the lymph, and is obligated by contract to sell his services at a fixed price. There is said to be a clause by which the poor are provided for.

Please let me know in your November number whether there is anything genuine in the lymph and reported cures, and what you think of this method of introducing a great discovery, if it is one.

Yours very respectfully,

Geo. E. Walton, M. D.

Daytona, Fla.

UNIFORMITY OF THE REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE THROUGHOUT THE UNITED STATES.

Editor New England Medical Monthly:

The idea of uniformity of the requirements for the license to practise medicine throughout the United States is an old one. The efforts in this direction, however, seem not to have been accompanied by the desired result. After all appearances the time is come for taking further steps in this direction. It is evident that the medical profession regards the uniformity of the requirements not only as desirable, but as absolutely necessary, for several reasons.

The Wayne County (Michigan) Medical Society was so strongly impressed by the necessity of this measure, that it appointed a committee of five to investigate the question.

Circulars which have been sent to the authorities in the different states and territories met, to a great extent, with very satisfactory preliminary replies.

The blank contained seven questions, of which 5, 6 and 7 were the most important:

5. Would you be inclined to favorably consider the plan of entering into a state of reciprocity with other states (or territories) which have practically the same requirements for the license of practising medicine as your state (resp. territory) has?

6. Would you join in the efforts in working out a memorandum to be presented to the legislative bodies of the different states, with the view of introducing a bill as to the subject matter and would your Secretary co-operate with us?

7. Have you any suggestions to make?

Up to September 14th, answers were received from 39 states and territories.

Favorable answers to question 5 or 6—34. Unfavorable answers to question 5 and 6—0. Favorable answers to question 5—30. Favorable answers to question 6—30. Unfavorable answers to question 5—4. Unfavorable answers to question 6—1.

The unfavorable answers were accompanied by explanations which

give hope that the difficulties might be overcome which, at present, did not allow a favorable reply.

We also met with approval and encouragement from other sources. The Wayne County Medical Society takes the liberty to suggest that the medical press advocate the matter and systematically pay attention to the details which might present themselves. We further suggest that the matter be taken up by all medical societies in the country and as we are unable to reach all of them, we ask for your assistance.

The Wayne County Medical Society solicits your co-operation and suggestions, for which kindly accept our thanks in advance.

Very respectfully yours,

E. Amberg, M. D.,

Secretary of Committee.

Detroit, Mich.

32 West Adams Ave.

REPORT OF COMMITTEE, SEPT. 14, 1899.

BY E. AMBERG, M. D.,

Secretary of the Committee.

The committee appointed by the Wayne County Medical Society met several times. It appeared that the time was too short to follow up the two questions put by the society, therefore, only the Uniformity question was taken up. The committee sent to the authorities in the 51 states and territories circular letters and blanks.

The committee is glad to acknowledge the prompt answers which have been received.

Naturally the answers could only be of a preliminary character.

The committee begs to submit to the society the suggestion to express their thanks to the parties concerned and to send them the report of the committee.

Answers have been received from 36 states and 3 territories.

Favorable answers to questions 5 or 6—34. Unfavorable answers to questions 5 or 6—0. Favorable answers to question 5—30. Unfavorable answers to question 5—4, Ark., Cal., Col., Conn. No answers to question 5—1, Ohio. Not prepared to answer question 5—4, Ala., Del., Mass., W. Va. Favorable answers to question 6—30. Unfavorable answers to question 6—1, Ky. No

answers to question 6—2, N. J., Penn. Not prepared to answer question 6—6, Ala., Ark., Del., Mass., Miss., W. Va.

It must be remarked that the unfavorable answers are accompanied by explanations which make it not at all impossible to overcome the difficulties, which, at present, do not allow a favorable reply. It must further be considered that in some states there might be no authority in this matter; viz., in Michigan at present. Naturally no answer could be expected from such a state. Some of the answers to question 7 might be reported in extenso. (see answers.)

After all, it is the desire of, we might say, the majority of the authorities all over the United States, to have the matter settled. Editorials have been noticed in the *New York Medical Journal* and in the *Physician and Surgeon*. Other parties also encouraged the movement. The committee found that there existed a National Confederation of State Medical Examining and Licensing Boards. However, the committee is of the opinion that the medical societies of the United States ought to act separately, at least for the first time, because in this way, the aim of the National Confederation can only be furthered.

Only one single state gave as reason for not answering, their membership to the above mentioned society.

It was understood by the committee that the society did not expect any final results, because these can only be reached in the course of years. The movement has only been started and we can report that the outlook is promising.

We see that many parties are now interested in the matter.

There exists also a strong desire for a better medical education. In order to bring the movement to the knowledge of wider circles in the medical profession, the committee suggests, that the Wayne County Medical Society, without delay, send a circular to all the medical papers and all National and State Medical Societies in the United States, also to some of the other larger ones, reading like this: (Circular.)

It appears that the laity does not quite understand that questions of

this kind are of not less importance for them than they are for the medical profession. Here the press must do its part. The committee appreciates the interest the daily press is taking in the matter. We are convinced that the press can only approve of the movement and that it is aware of the fact, that in this case, not much can be accomplished without the vigorous assistance of the same. We hope the press will follow up the movement with tireless energy because it is in the interest of the national welfare.

[Signed]

George G. Gordon, M. D.
Frank D. Summers, M. D.
E. H. Troy, M. D.
E. B. Smith, M. D.
E. Amberg, M. D.

—:O:—

Abstracts.

ACUTE NEPHRITIS IN CHILDREN.—Dupen (*Jour. de Med.*) has collected a large number of cases of acute nephritis in children. He finds that the affection is in reality more common than is supposed, but, fortunately, the disease is much more hopeful in its prognosis than in adults. The author looks upon measles as a more frequent cause than is supposed by some authors, for it is definitely stated by some that it is extremely rare in this condition. Irritation and absorption from the skin would seem to be a cause of acute nephritis; thus, blistering, the application of turpentine, carbolic acid, etc., may produce nephritis, and it has been known to follow burns, severe electrization, too hot baths, and inflammatory conditions, as eczema, erysipelas, impetigo. Chicken-pox has also been observed to cause nephritis, as first pointed out by Henoch. Others consider it exceptional, but the author quotes Descroizille as stating that the most frequent complication of varicella is nephritis. These cases all seem to terminate favorably. Post-vaccinal nephritis is also described, and acute inflammation of the kidney may even follow tonsillitis, and a case is quoted in which a recurrent tonsillitis was always accompanied by acute nephritis. Lastly,

the author states that nephritis may be the result of ordinary gastrointestinal intoxication, more particularly when there is dilatation of the stomach. This has been observed in children as young as eleven to sixteen months old fed by the bottle, and in whom vomiting and diarrhea were prominent symptoms. In these cases there is very marked abnormal fermentation taking place with the production of more or less toxic products, which, when absorbed, are competent to produce nephritis. The duration of these varies from two to four weeks, and may be accompanied by all the usual signs of Bright's disease.—*Archives of Pediatrics.*

GONORRHOEAL SALPINGITIS.—Taylor (*The Scalpel*) has found that many women suffering from tubal disease have at some time been exposed to the infection of syphilis, as well as gonorrhoea. These cases show, as a rule, marked improvement after a prolonged course of mercury and iodides; it is usually the case that the gross physical signs of the disease will slowly and permanently disappear. More than that, many cases in which there is no history of syphilis, but undoubted evidence of gonorrhoea get entirely well under the same treatment. Cases of pyosalpinx, whenever possible, should be treated by free incision of the posterior vaginal fornix, by thorough exploration and emptying of all pus-cavities from the pouch of Douglas, and by iodoform gauze drainage. This is far preferable to the older operation of removal of the appendages which is not only much more dangerous, but is peculiarly liable to be followed by faecal fistula, an operation sequel sometimes worse than death itself. Such cases of mixed infection and acute suppuration treated by operative evacuation of the pus with or without removal of the appendages, do sometimes not only recover but remain permanently well without further treatment, the acuteness of the inflammation appearing to terminate the process of infection. In other cases, recovery is not so complete or relapses are met with, and these cases should be followed up by a course of specific treatment, the

beneficial result of this being often immediately manifest when the wound tissues are unhealthy and the healing is delayed.—*The Med. Stand.*

ALCOHOL AS AN ANTISEPTIC.—Two papers, that of Braatz (of Königsberg), and that of Sänger (of Krefeld), remind us of the great difference between the theoretic and the practical value of alcohol as a medium for rendering the hands—surgically clean. Both refer to the fact that alcohol is, in the test-tube, only a feeble germicide at best, but neither attempts to explain why it is, that we obtain better results through its use. Sänger maintains, that absolute alcohol fails to destroy the staphylococcus aureus in 20 minutes, and he found, furthermore, that its germicidal power increased with dilution until 40 per cent. was reached. Still, at that strength, it does not, with absolute certainty, kill the above mentioned germs. The critic gives these gentlemen little credit for originality in this matter, for Minervini taught us substantially the same thing years ago, although the results of the latter differed from those just quoted. He found alcohol most powerful in 50 to 70 per cent. dilution. The various chemicals, when dissolved in alcohol, have considerably less effect upon germs, he affirms, than have aqueous solutions of the same strength. He could demonstrate further, that boiling in alcohol was the more effective the more water it contained. Thus Minervini was the first to show us, that the school to which we have pinned our faith, can scarcely be dignified by the name of antiseptic. The instructive point in Sänger's article is, that certain disinfections antagonize each other, viz., the effect of a carbolic solution, used upon the hands after alcohol, is much less than that of alcohol alone. His results with carbolic acid, dissolved in alcohol, were practically the same as those which I have quoted from Minervini, in his use of the different chemical antiseptics. Sänger says, that of all chemicals, chlorine is the most powerful disinfectant. To make the use of the same practicable, he applies a 2 to 5 per cent. solution of hydrochloric

acid for two minutes, then $\frac{1}{2}$ to 2 per cent. solution of potassium permanganate for one minute. The brown discoloration of the skin is removed in a few seconds, by the use of sulphuric acid. In this way, he brings about the liberation of nascent chlorine, oxygen and sulphuric acid, and insures a disinfection which is, he concludes, not to be attained by any other method. What the effect upon the skin might be, we are only left to surmise.—*Courier of Medicine.*

CARCINOMA OF THE LARYNX FOLLOWING SYPHILIS OF THAT ORGAN.—

In a paper presented to the Seventieth Reunion of German Naturalists and Physicians, Dr. Keimer reports two cases of cancer of the larynx consecutive to syphilis. The first patient was under treatment for tertiary manifestations on the side of the nose and in the naso-pharynx. He followed the treatment in a very irregular fashion and never ceased to make an excessive use of tobacco and alcohol. One day he presented himself with a hoarse voice. There was found a smooth swelling of a reddish-yellow color on the right aryteno-epiglottidean fold adjacent to the epiglottis and entrance to the larynx. The whole resembled a gumma. Potassium iodide was again prescribed, with rest for the larynx. After some time the voice was more clear and the symptoms were considerably lessened. Some time subsequently a small ulcer of the right pyriform sinus and the posterior wall of the larynx was found. The patient was still irregular in obeying instructions and drank and smoked to excess. The ulcer enlarged, commenced to proliferate and assumed the aspect of a growth. Potassium iodide produced no more effect. A first microscopical examination yielded no result, but later the disease was shown to be cancerous. An operation could not be immediately performed and when it became possible there was failure in removing the entire larynx. The patient died three weeks later from an infectious bronchitis.

The second case resembled the first in all points. The treatment was interrupted, there was abuse of

tobacco and alcohol, an immoderate strain upon the voice. The patient declined operation.

The author does not think that any relationship between tertiary syphilis and carcinoma should be predicated from these two cases. MM. Hopmann, Flatau and Heymann were of the same opinion. M. Lieven, on the contrary, believed that the cases illustrated the occasional appearance of cancer in a syphilitic. *Revue Hebdomadaire de Laryngologie, etc.*

OVERCROWDING IN THE NURSING PROFESSION: A REMEDY.—The profession of trained nursing is scarcely out of its teens, and yet one already hears the cry that the field is overcrowded, a cry which the city physician, besieged by nurses in search of work, knows is only too true. Various remedies are proposed to relieve the condition for which the rapid increase in the number of hospitals is responsible, an increase which has worked ill to the physician as well as to the nurse.

A reduction in the number of training schools by the union of those connected with small hospitals, will be a wise change, both because it will lessen the supply of nurses and because it will afford better instruction to those who now graduate from special hospitals with but inadequate training. The lengthening of the course of training to three instead of two years is also desirable. So, too, would be the change from a school in which the pupil nurse is paid for her work to one in which she pays for her tuition.

Yet, with all these checks to lessen the number of trained nurses, the profession will remain overcrowded so long as graduate nurses remain in the city and demand \$20.00 a week for their services. There is, however, an almost limitless field for those women willing to go into the country and take for their services what their patients can afford to pay. To the woman who, in addition to earning her living, would like to feel that she is doing some good in the world, the country town ought especially to appeal. The need for trained nursing there is great, and

the demand for the work will grow as its worth becomes known.

A physician in a village of 1,000 inhabitants gets from one-third to one-half the fee for a given service which the city physician, practicing among the well-to-do, receives. The nurse in a country town of this size could command from \$7.00 to \$10.00 a week. Living expenses will be much lower than in the city, and the diminished income will be more than offset by the lessened outgo. The social position of a nurse in a small town may, and usually will, be superior to that which she holds in the city, where nurses live almost as a class apart.

It was the fortune of the writer not long ago to be called to the sick bed of a friend in a country town remote from the city. The attempt was made to find a nurse to relieve the tired-out sister who had acted as such. The only women in the village who did nursing, neither of whom could be had, were two, who during the lulls in business did washing and scrubbing. As nurses they received \$1.00 a day. To those who are accustomed to the tender ministrations of the trained nurse, a sponge bath given by their laundress would at least seem rather unseemly. This town supported four physicians, and the one in charge of the case said that he alone could much of the time keep one nurse employed.

The woman to succeed in the country, and success surely awaits the right woman, must be one possessed of great adaptability, of good judgment, able to hold her tongue, willing sometimes to do work outside the usual line, and above all a woman of common sense. The country doctor will welcome her coming, for he will recognize in her an ally for want of whom he has fought many a losing battle.—*Buffalo Med. Jour.*

DULLNESS OVER APEX OF LUNGS WITHOUT PATHOLOGICAL CHANGES BEING PRESENT.—W. Kernig (*Zeitsch. f. Klin. Med.*), during many years of repeated investigations, found in marasmic patients an equal apex dullness over both lungs, without marked symptoms on auscultation, except diminished respiratory mur-

murs. On making post-mortem examinations of such cases, many of which had been mistaken for tuberculosis, the lungs were found entirely normal. The difficulty of percussing such patients, together with the presence of other symptoms, makes the error in diagnosis a pardonable one. The author explains this peculiar position by the relaxed muscles and by the fact that the long lying of the patient in bed causes a diminution of elasticity and a contraction of the air spaces within the lungs, together with a retraction on the part of the lungs themselves. Numerous experiments were also made by the author on the cadaver, and he has by this means obtained much valuable information.—*Ex.*

CEREBRAL AND MENINGEAL SYPHILIS TREATED BY INTRAMUSCULAR INJECTION OF INSOLUBLE SALTS OF MERCURY.—J. C. Stinson (*N. Y. Med. Jour.*) reports a case illustrating the value of this method of treatment in a severe case of tertiary syphilis with marked cerebral symptoms. Treatment consisted of the intramuscular injection of two grains of salicylate of mercury suspended in sterilized almond oil, and later ten grains of iodide of potassium were given three times daily, increasing two grains each day. As to technique, if the salicylate of mercury is used and two grains can be tolerated at each injection, two injections should be given a week till nine or ten are given. Forty per cent. of the cases can take two grains; forty per cent. more cannot stand this amount, as it produces diarrhea, painful colic, sometimes considerable pain locally; these patients can be given a grain and a third at each injection, given three times a week. The remaining 20 per cent. will not submit to injections on account of the pain. Between the series of injections, which should be given for three years or longer, four series each year, iodide of potassium is given. The syringe used is an aspirating syringe, with a needle two inches long. The site for injection is a point about one-quarter to half an inch above the junction of the inner and middle thirds of a line carried from the upper border of the

great trochanter to meet the cleft of the buttock at right angles. The needle is withdrawn slowly, a little aristol or other antiseptic powder dusted on and covered with a few drops of collodion.—*Med. Rev.*

THE CAUSES OF BRONCHITIS.—In this year's Lumleian lectures, delivered by Dr. Samuel Gee at the Royal College of Physicians in London, the following closing remarks were made: "We have found it to be highly probable that most catarrhs are due to a specific infection, and they often depend upon contagion spreading from man to man. This doctrine has very important bearings upon medical practice. It leads us to believe that the means by which we may prevent catarrh are to be found in ventilation and cleanliness, if, indeed, ventilation be not a kind of cleanliness. Experience confirms this belief. When epidemic catarrh prevails, where do we find most of our patients? In those houses which are obviously the worst ventilated, even though they be the spacious houses of the rich. And where do our patients catch their catarrh? Either in houses of the kind I have mentioned or in buildings where men most do congregate, especially in offices, shops and churches. Large shops and stores, public museums and libraries, are ventilated as little as possible for fear of their contents being spoilt by smoke and dust. Many churches, both in town and country, are never properly aired for another reason—namely, because their architecture does not admit of it. Those 'rich windows which exclude the light' do worse than this—they exclude fresh air. The revival of Gothic architecture has been, from the sanitary point of view, a great mistake. Our despised forefathers of the eighteenth century erected plain and simple buildings which could at least be well aired, well lighted and kept warm and comfortable; nay, even the much ridiculed churchwarden, with his brush and pail of whitewash, was a praiseworthy minister of health. Modern dwellings are no better than the churches. In the matter of domestic sanitation people have fixed their attention too

exclusively upon the drainage and the water supply; light and air are not reckoned. Many of the large red-brick houses which have been built in great numbers at the West End of London and elsewhere during the last twenty-five years cannot be properly ventilated. The well of the staircase ought in every house to be a reservoir of pure air, and to have an independent supply from without. But in many houses the staircase cannot be ventilated except through the rooms, and, in fact, it never is ventilated. Nor are the rooms themselves much better off; their heavily mullioned windows are designed with small regard to the transmission of light and air. The subsidiary and merely ornamental arts, which do no more than please the eye, are studied to the neglect of that far greater art which promotes the happiness and welfare of the whole man—the art of preserving health."—*Med. Rec.*

INSOMNIA IN THE FAILING HEART OF MITRAL INSUFFICIENCY.—Agents for producing sleep or calming nervous agitation are of high importance in the treatment of the failing heart of mitral insufficiency. In some cases chloralamid has been useful as it is always a harmless hypnotic. It may be given in doses of from 20 to 50 grains in wafer cachet or in weak spirituous or acidulated solutions. Each draught should be made up separately. I prefer a combination of 20 to 30 grains of chloralamid with 30 minims of dilute hydrobromic acid with a dram of syrup of orange flowers and an ounce of pure water, administered at bedtime. Another harmless agent is urethane (ethyl carbonate), which is freely soluble in water, the solution having a saline but by no means unpleasant taste. In doses of from 15 to 20 grains at bed-time I have found it induces a calm, natural sleep, lasting in a case of severe cardiac failure for more than five hours, the patient being manifestly refreshed on waking. Paraldehyd is perhaps a little stronger as a hypnotic. It may be administered in doses of from 30 to 90 minims in diluted syrup or in almond mixture, or in capsules (each

containing 40 minims); it has a powerful and unpleasant taste.

In a considerable number of cases of manifestly distressful symptoms of dyspnea and insomnia no agent succeeds so well as morphia. By far the best way of administering it in case of cardiac disease is by hypodermic injection. The solution of the acetate or the hydrochlorate or the solution of morphia and atropia may be used. The first dose should be small—one-sixth or one-fourth of a grain—but this may be increased subsequently to half a grain. Care should be taken that the administration shall not become habitual.—*Sansom in Allbutt's System of Medicine. Philadelphia Medical Journal.*

DISINFECTION OF SLEEPING ROOMS. Professor Konig, of Gottingen, in a recent article on this subject says that at one time while he was practicing medicine in Hanau, he suddenly discovered that his bedroom was thickly inhabited by obnoxious insects. A friend assured him that he could easily get rid of the pests, and proceeded to fumigate the apartment with corrosive sublimate. The success of this measure was most gratifying, and when the room was opened the dead bodies of various kinds of insects were seen strewn about the floor. This incident led the professor to hope that the same means would be effectual in destroying the infectious elements of contagious diseases and a trial in private houses after scarlet fever or measles and in hospitals after erysipelas or pyæmia, gave most satisfactory results. Since adopting this method he has never seen a second case of a contagious disease which could be attributed to infection remaining in the room in which the patient had been confined.

The mode of procedure is very simple. From one and a half to two ounces of corrosive sublimate are put on a plate over a chafing dish and then the windows and doors of the room are closed. At the expiration of the three or four hours the windows are opened and the apartment is thoroughly aired. The person entering the room should take the precaution to hold a sponge or cloth

over the mouth and nose in order not to inhale the vapor. The following day the windows are again closed, and some sulphur is burned, in order to neutralize any of the mercurial fumes which may linger about the furniture and other articles. The room should then be again aired and cleaned, when it will be ready for occupancy.—*Massachusetts Med. Jour.*

NOSOLOGY OF THE SO-CALLED FUNCTIONAL DISEASES.—Drs. Joseph Collins and Joseph Fraenkel, of New York, in *Med. Record*, claim that these diseases are due to disturbances in the sympathetic nervous system, either as centrally represented in the brain and cord, in its ganglia, or in its peripheral nerves. The diseases that they include under the term functional for the purposes of their paper, are insanity without gross lesion, epilepsy in all its varieties, hysteria and allied conditions, the neurasthenic state, migraine, angioneurotic edema, asthma, non-pancreatic diabetes mellitus and insipidus, Graves' disease, rheumatism, rheumatoid arthritis, arthritis deformans, arterio capillary fibrosis, pathological obesity. They contend that these diseases are better explained on the basis of disease or derangement of the sympathetic nervous system than any other assumption. They all have a common feature of heredity, degenerating and influenced by surroundings. A striking feature of the functional diseases is their mode of onset. This is almost invariably insidious. The patient can give but little information as to the initial phenomena. In the case of organic, the reverse is the case. In these, the patient can tell in most cases the very day the trouble began, and point out the initial phenomena. In the case of functional disorders the patient's language is inadequate to describe all his ills; whereas, in the organic diseases, the patient states his case in a few words and usually makes light of his trouble. Then again, in the matter of treatment there is a feature in common to all the functional diseases. The patient's strength must be improved in all cases. The vegetative system must be attacked. This does not mean

that the acidity of the blood in rheumatism should not be lessened, or that the nasal membrane should receive no attention in asthma; but behind all this there lies a weakness that requires long-continued toning.
Ex.

DERMOID CYST IN THREE-YEAR-OLD GIRL.—Dr. H. Hutt (Ungar. *Med. Presse*) reports a case of operative embryoma ovarii in a 3-year-old girl. She complained of severe abdominal pain of several weeks' duration. Examination under anesthesia revealed a dense, movable mass the size of an orange located in the right inguinal region. Kidneys, liver and spleen normal; no temperature; urine and passages normal.

Laparotomy was performed and an ovarian tumor removed, together with right tube. Tumor weighed 133 grams and consisted of two large cysts, the lower one containing a small walnut-sized mass, which was partially covered by reddish, curly hair, and immediately beneath this a small portion of normal bone.—*The Med. Stand.*

HYPODERMIC INJECTION OF SILVER NITRATE OVER THE COURSE OF THE VAGI IN THE TREATMENT OF PULMONARY CONSUMPTION.—Mays (*Boston Med. and Surg. Jour.*; *N. Y. Med. Jour.*) has followed practically his belief, often announced, that the lesions of pulmonary consumption are the result of a defect of nervous tone, in which the vagi are seriously implicated. A suggestion was afforded by the operation of vagus stretching in severe cough associated with exophthalmic goitre and in epilepsy, and the same principle was sought to be carried out in the counter irritation resulting from the injection of nitrate of silver immediately over the course of the nerves in the neck. It was found that from four to seven minims of a 2½ per cent. solution of pure silver nitrate answered the purpose best. The local visible effects of the injections show themselves in nodular, sometimes in diffuse, swelling and in redness and pain. The number of injections necessary depends on circumstances. As a rule

it is a good plan to begin by one injection on the side of the neck on which the affected lung is situated. In a week or ten days this is to be repeated and in urgent cases it may be continued at intervals of three or four days. The deductions which may be drawn from this plan of treatment are:

1. That the best results are obtained in incipient cases, both in regard to the symptoms and physical signs of phthisis.

2. That in most of the advanced cases of this disease the injections have a good and in some instances an exceptional effect on the symptoms and physical signs.

3. That in the great majority of the far advanced cases they ameliorate the cough, expectoration and some other symptoms temporarily, but have little or no influence on the local condition of the lungs.—*Albany Med. Annals.*

GREEN STOOLS IN ENTERIC FEVER. The occurrence of green stools in enteric fever which has recently given rise to some discussion in the *British Medical Journal*, is dealt with in an article in the *St. Bartholomew's Hospital Reports*, by Drs. A. E. Garrod and Drysdale, and the late Professor Kanthack. They describe the character of this kind of stool in three cases of enteric fever. The stools consisted of particles resembling chopped parsley suspended in a liquid, which on filtration was turbid but almost colorless. They were acid in reaction and devoid of offensive odor. Chemical examination of the solid particles showed the absence of urobilin or its chromogen, to which the normal color of stools is due, and the presence of biliverdin; and this the authors believe to be the coloring matter present in all green typhoid stools. The biliverdin probably exists in combination, since it can only be extracted by the use of acid alcohol. This view as to the causation of the green color was held by the older writers, but lately Lesage and others have asserted that the pigment is frequently of bacterial origin. In consequence of these statements the authors made cultures of organisms from these stools, and obtain-

ed as the predominant organism the bacterium coli commune or some member of an allied group. *Proteus vulgaris* was found in two cases, but no organism capable of forming a green pigment when grown in artificial media. Presence of unchanged bile pigment in the stools may be due to hastened peristalsis associated with extensive ulceration or catarrh about the lower end of the ileum and the colon, that is, at that portion of the bowel where the normal conversion process of the bile pigment into urobilin takes place. Possibly, however, bacterial action may be concerned in some way or other with the absence of the usual processes of transformation of the biliverdin into urobilin.—*Brit. Med. Jour.*

THE ROENTGEN RAYS IN THORACIC DIAGNOSIS.—The Roentgen rays are steadily coming into more constant use by the great experts in physical diagnosis, in the recognition and differentiation of intrathoracic conditions. Last year at the meeting of the German Medical Congress, Dr. Schott, of Nauheim, demonstrated by a series of most careful skiagrams that even our knowledge of so delicate a subject as heart dilatation could be greatly aided by this new diagnostic method. In the proceedings of this year's German Medical Congress, an abstract of which appeared recently in the *Medical News*, it will be seen that the distinguished heads of German clinics frequently turn to the X-rays for help in conditions that were formerly supposed to be fully revealed by older methods of physical diagnosis.

In the diagnosis of aneurism practically all authorities are agreed that the Roentgen skiagrams are of the greatest service. In cases in which there are suspicious symptoms in the thorax, and especially if there is any, even the slightest, reason to suspect aneurism of the descending aorta, the X-rays are a most reliable adjuvant.

There are heart conditions in which a series of skiagrams furnish information that is of the greatest value for prognostic as well as diagnostic purposes. This, to be sure, is the more exact and delicate side of the

application of the Roentgen rays, and one that requires special training, but the time spent in acquiring the technic for thoracic diagnosis cannot fail to be profitably expended—a fact that will become more and more apparent in the near future.—*Med. News.*

EDEMA IN BRIGHT'S DISEASE.—Reichel (*Centralblatt für innere Medizin*) states that several years ago he expressed the opinion that impaired functional activity of the kidney led to a physical alteration in the tissues owing to the retention of toxic substances in the blood; this produces the edema and also cardiac hypertrophy, as a result of the increased arterial tension. Reichel has undertaken a series of experiments to support this view. He has compared the power of absorption in renal patients with that in patients with cardiac disease, as well as with that in healthy subjects. After the injection of fifty cubic centimetres of saline solution in these cases, he found that absorption occupied a much longer time (sometimes eight or ten days) in renal patients. The normal transudation and resorption of the tissue fluids depend on metabolism and the functional activity of the kidneys. Reichel claims that the dropsy of renal disease is due to an alteration in the power of absorption.—*Ex.*

RELATIVE TOXICITY OF COCAIN AND EUCAIN.—A. H. Peck, M. D., D. D. S., Professor of Materia Medica, Therapeutics and Special Pathology in Northwestern University Dental School, Chicago, in a paper entitled "Relative Toxicity of Cocain and Eucain," read before the Section of Stomatology at the 50th Annual Meeting of the American Medical Association, Columbus, June, 1899, arrived at the following conclusions:

1. The action of cocain is inconstant; one never knows whether the symptoms occasioned by like quantities of the drug, in animals or individuals, under like circumstances, will be similar or dissimilar.

2. The action of eucain is constant. The symptoms occasioned by the use of like quantities in animals

under like circumstances, and so far as my experiments have gone, in different individuals also, are the same.

3. The first action of cocain on the heart is that of a depressant, and on the respiration that of a mild stimulant; the after-effects being, on the heart, that of a decided stimulant, and on the respiration that of a decided depressant.

4. The first action of eucain on both the heart and respiration is that of a stimulant, the after-effects being that of a decided depressant.

5. Cocain causes death in animals by paralyzing the muscles of the respiratory apparatus, the heart's action continuing in a feeble way for a brief period after breathing ceases.

6. Eucain causes death in animals by paralyzing the muscles of the heart and of the respiratory apparatus, they ceasing to operate simultaneously.

7. Eucain in toxic doses nearly always causes nausea, and occasionally vomiting.

8. Cocain is much less nauseating and scarcely ever causes vomiting.

9. Eucain is decidedly a diuretic, causing vesical discharge in a majority of instances in which a toxic dose is used.

10. Cocain is not a diuretic to any appreciable extent, vesical discharge having occurred in only one instance in connection with all my experiments.

11. The pupils of the eyes, in nearly all cases of cocain poisoning, do not respond to light, and the eyeballs bulge more or less from their sockets.

12. The pupils of the eyes in most cases of Eucain poisoning do respond feebly to light, and the eyeballs rarely bulge from their sockets.

13. The action of the toxic doses of Eucain is more like that of a paralyzing, tetanoiding, convulsion-producing agent, than it is like an anæsthetizing one, the plantar and cremasteric reflexes nearly always remaining active.

14. Toxic doses of cocain cause general anæsthesia in connection with the other symptoms in the majority of cases.

15. True tetanus of all striped muscles of the limbs, and Cheyne-

Stokes' breathing nearly always occur with the use of cocain; but either occurs seldom when eucain is used.

16. Cocain is at least three times more toxic than Beta-eucain, and Alpha-eucain is as toxic as cocain.

17. Boiling does not destroy the efficacy of cocain, but it does modify it; and boiling in no degree lessens the efficacy of eucain.

The above deductions have been made only after many experiments in connection with each individual point. I have observed many interesting features in connection with the relative worth of these drugs as local anesthetics, but this paper is not meant to treat of this phase of the work. There is much experimental work yet to be done in this connection, the results of which I shall be pleased to present at some future meeting.

PECULIAR RINGWORM OF THE HANDS.—Pringle (*British Journal of Dermatology*), at a meeting of the Dermatological Society of London, exhibited a patient, a man, 28 years old, suffering from an eruption on the backs of both hands of six weeks' duration. The eruption consisted of numerous scaly patches of dermatitis, marginate in character, distributed over the dorsal surface of both hands and of all the fingers as far as the roots of the nails. One patch, situated over the metacarpophalangeal joint of the right index-finger, was eczematous and discharging. The hair, which was unusually abundant over the sound skin, was scanty over the diseased patches. Microscopical examination of the hairs demonstrated the presence of abundant mycelium. The case recovered in a few days under the use of an ointment of salicylic acid and ammoniated mercury.—*Ex.*

INVERSION OF THE UTERUS.—H. E. Marion, in the *Boston Med. and Surg. Jour.*, reports two cases of this rare accident. Both were primipara. In one there was apparently no cause for the accident; in the other, in the third stage, it is stated that "the uterus did not contract quickly, and I stimulated it by manipulation.

After fifteen minutes, when there had been apparent contraction of the uterus, I made slight but not continuous traction of the cord, at the same time keeping one hand on the uterus." After the removal of the placenta flowing was considerable, and it was noticed that there was nearly complete inversion. In both these cases reposition was established without much difficulty, and both patients made an uninterrupted recovery.

In discussing the etiology of the affection, the writer states that no satisfactory explanation has yet been given, but that undue tension of the cord and a paralytic condition of the uterine muscles are important factors. The most fruitful source of inversion is traction of the funis in order to remove the placenta. A vulnerable condition in the patient, on the one hand, and a faulty technique of the obstetrician on the other, or a combination of these two with perhaps associated factors, are chiefly responsible for the accident.—*Ex.*

A CASE OF INTRAUTERINE EPIDEMIC CEREBRO-SPINAL MENINGITIS.—R. B. H. Gradwohl (*Phila. Med. Jour.*) reports a case of a woman of 31 years, who died of cerebro-spinal meningitis; she was seven months pregnant. At the necropsy typical meningitis was found on opening the cranium; there was great injection of the pia-arachnoid and an abundant purulent exudation scattered here and there over the entire meningeal surfaces, particularly at the base. The same condition was found upon the cord. An exact counterpart of the condition of the maternal meninges was found in the fetus, with perhaps more of a sero-purulent than a purely purulent exudation, as found in the mother. Bacteriologic examination of fluid from both the maternal and fetal meninges revealed the presence of the diplococcus intracellularis meningitidis. Pathologically the meninges exhibited about the same condition of inflammation and degeneration such as is found in epidemic cerebro-spinal meningitis. In whatever way the specific micro-organism may gain ac-

cess to the fetal tissues from the mother, it can be said that in a disease like typhoid, or epidemic cerebro-spinal meningitis, there must surely be some selective affinity on the part of the micro-organism for some tissues.—*Med. Rec.*

TUBERCULAR PERITONITIS.—Holmes (*Annals of Gynecology*) concludes:

1. Tubercular peritonitis is a relatively common disease.
2. It is never a primary disease, though it is usually impossible to find the initial focus.
3. Recovery follows laparotomy, as a general rule, unless there is an initial focus to keep up the disease.
4. This disease appears in three different forms—the exudative form, the dry form and the ulcerative form and they are recognizable in the order named.
5. Microscopical examination of the peritoneum is sufficient for a positive diagnosis. The demonstration of microscopical tubercles, or the recognition of the bacilli are only confirmatory.
6. Puncture of the abdominal wall for diagnosis or for the removal of ascites and injection of air, fluid, or iodoform, is dangerous and should not be practiced.—*The Med. Stand.*

THE OPERATIVE TREATMENT OF PULMONARY CAVITIES.—Wiener (*Münchener medicinische Wochenschrift*) describes a case of gangrene of the left lower lobe, which he treated by pneumotomy. He turned back a flap of skin and muscles eight inches long, and after resecting ribs rather freely, came upon the pleura. As the parietal and visceral layers were adherent he was able to proceed to the pneumotomy proper at once. With the knife of a Paquelin cautery he penetrated the lung for about two inches, when the cavity was opened. It was found to contain a large slough of pulmonary tissue as big as a fist; this was removed and the cavity packed with iodoform gauze. Five days later another cavity was found, which communicated with the first by a narrow opening, and resembled it in also containing a large slough. This was treated in the same way.

The quantity of expectoration at once diminished, and became simply purulent instead of fetid. Six weeks later the cavity had completely closed. There was not even a sinus left, and the patient went out of hospital having gained over thirty pounds in weight. The writer considers that such cavities should be opened freely.—*Ex.*

INTRAVENOUS INJECTIONS OF MERCURY IN THE TREATMENT OF SYPHILIS. Dudley Tait (*Occidental Med. Times*) claims to have had good results in a number of cases in which other methods of administration of the mercurials had failed. The most practical solutions used for injection are the cyanide $\frac{1}{10}$ to $\frac{1}{100}$, and the sublimate $\frac{1}{10}$ to $\frac{1}{100}$. Amount injected daily varies from 1 to 3 cc. This method of administration is based upon the fact that mercury has no effect on the organism until it enters the blood. Mercury can be detected in the urine in ten minutes after injecting and will have all disappeared within thirty-six hours. The intravenous injections should be used where other methods have failed and in cases demanding rapid action or early and intense mercurialization. No ill results need be feared if one employ an ordinary amount of skill and care. A small needle should be used.—*Med. Rev.*

HYPODERMIC USE OF ARSENIC.—Moyer (*The Chicago Clinic*) suggests the use of a solution of the anhydrous salt of arsenate of sodium in those nervous diseases in which arsenic is indicated. A number of cases are reported in which the hypodermic use of a 1 to 5 per cent. solution of this salt produced very satisfactory results where other methods had failed. Fowler's solution gave very unsatisfactory results when used hypodermically causing cellulitis and a consequent abscess, in all probability due to the presence of arsenious acid which had not been converted into arsenate of potassium. Such results have not been observed when the arsenate of sodium solution was employed, and only in several cases where a large amount was injected

at one time was a slight induration noticed. The value of the hypodermic use of this drug is readily appreciated when one stops to consider that it is at once taken up by the blood and carried to the tissues, without running the gauntlet of the liver when the toxic effects of the drug are largely focused.—*Med. Rev.*

ECTOPIC GESTATION: OPERATION LATE IN PREGNANCY.—Boissard describes two successful operations, classed as "abdominal," through the primary seat of gestation, tubal or otherwise, can hardly be proved late in pregnancy. The first patient was 29; the last period occurred on March 15, 1898. Abdominal section was performed on October 27th, as sudden pain and tension of the sac set in. The sac was incised, and a living foetus extracted; the edges, which bled very freely, were sewn to the abdominal wound; they were so thin and soft that some of the placental tissue had to be included. The cavity was packed with iodoform gauze. A week later there was high temperature; the placenta began to putrefy, notwithstanding two irrigations of the sac daily. The foetid odor disappeared, and the temperature fell immediately after irrigation with oxygenated water (10 volumes to 1 litre of 1.7 pint). But, there was much suppuration; an attempt to detach the placenta on the twenty-eighth day set up hæmorrhage, and renewed plugging was required. On the forty-fifth day the placenta came away. Seventy-seven days after operation a small fistulous tract remained. The second patient was 35, the last period occurred on January 19, 1898. Abdominal section was performed on November 7th. A macerated foetus, weighing four pounds, was extracted. The front of the sac was freely excised to allow of thorough plugging with iodoform gauze, and the edges were sewn to the abdominal wound. High temperature and foetor followed, disappearing as, in the other case when irrigation with oxygenated water was practiced. On the fifteenth day detachment of the placenta was attempted, but hæmorrhage was worse than even in the first case, and intravenous injection of serum was

found necessary, as well as plugging of the sac. The placenta came away eleven days later. The sutures began to come away in the discharges, and the sac took long to close. Eighty-five days after the operation a fistulous tract still remained.—*Bull. de la. Soc. d'Obstet. de Paris.*

HYSTERECTOMY.—At a meeting of the Société de Chirurgie, M. Ricord spoke on abdominal hysterectomy for uterine cancer and said that he had performed that operation ten times with only one death. The gravity of the operation was, consequently, in his opinion, not so great as was believed. None of his patients could have been operated on through the vagina, as the disease had in each case destroyed the greater portion of that organ. The speaker acknowledged that abdominal hysterectomy was a tedious operation, especially where the ligaments were infiltrated, but it had the advantage over the vaginal method that it permitted ablation of the infected glands.

M. Segond said that he performed ninety-five times ablation of the uterus by the vaginal method with a total mortality of 14 per cent.; most of the unsuccessful cases were those in which the vagina and the broad ligaments were invaded by the disease. As to the ultimate result of the operations, out of forty cases of relapse of which he had knowledge himself, the disease returned in thirty cases within the first year, seven in the second, one in the third, and one at the end of the seventh year. Among the cases that might be considered cured, one has already survived ten years, another nine years, two four years, and two two years. He only practiced six times abdominal hysterectomy for uterine cancer. Surgeons, considering this method is superior to vaginal hysterectomy in the treatment of uterine cancer, believed that it was less grave than the latter; according to them it was the only rational operation, permitting the removal of all the ganglions, and they hoped that by-and-bye the prognosis would be much more favorable than that given by vaginal hysterectomy. As to the gravity of the intervention, it was

certain that, thanks to the perfecting of the method of operating, abdominal hysterectomy was as benign as vaginal hysterectomy, but it was none the less true that in cases where the extension of the lesions necessitated ligature of the iliac artery the operation could not be considered less grave than the vaginal method. Those who advocated the abdominal method gave for one of their principal reasons the facility with which the infected tissues could be removed, but that pretension was impossible to realize, but if some few glands were removed could the operator affirm that he left no tissue susceptible to be attacked by the disease? However, he admitted that for a cancer of the body of the uterus or for those forms complicated with softening of the neck, so that it did not afford a hold for the instruments, the abdominal method was the best. When the lesions were not limited to the uterus he never interfered, preferring palliative treatment, which eased the patient and prolonged her existence, frequently for a considerable period.—*Paris Cor. Med. Press and Circular.*

ANOMALOUS ERUPTIONS IN TYPHOID FEVER.—J. M. Da Costa (*Amer. Jour. of the Med. Sciences*) reports several cases of typhoid fever presenting, during the course of the disease, eruptions similar to those of scarlet fever and measles. The scarlatina-like eruption is a uniform red rash, usually seen all over the body. It is easily influenced by pressure; it has its periods of greater or less intensity; it lasts generally a week or more; there is no desquamation; there is usually no sore throat or albuminuria; its presence does not seem to influence the temperature.

The eruption simulating measles is rarer and more misleading since the intercurrent of measles and typhoid fever is not uncommon. In typhoid fever the crescentic arrangement is absent, as well as the itching, desquamation, coryza and catarrhal symptoms found in cases of true measles. When there is an intercurrent of the two diseases, the onset of the measles is marked by the characteristic rise of temperature and

other symptoms peculiar to the disease are present.

Dr. Da Costa also describes a general mottling of the skin which may precede or attend either of the above described eruptions. He believes them to be all expressions of the same pathological condition and due to vasomotor disturbance from disorder of the cutaneous nerves. They seem to have no effect on the prognosis of the disease.—*The Medical Standard.*

INTESTINAL AUTO-INTOXICATION.—Mueller (*Centralbl. f. inner. Med.*) discussed in the Congress for Internal Medicine, the subject of auto-infection from the intestinal tract. According to the new auto-intoxication theories of disease, championed by Bouchard, Charrin and Albu, uremia, eclampsia, diabetic coma, gout and the conditions resulting from diseases of the thyroid gland, supra-renal body, etc., are properly called auto-intoxications, since they result from a poison found in the body. Intestinal intoxications are of another class, since they are due to products formed in the contents of the stomach or intestines by saphrophrytic bacteria. They are rather to be classed with poisoning by meat or milk. Poisoning by meat takes one of three forms, either that of an acute gastro-enteritis, or a typhoidal form, or a form similar to poisoning with homatropine. This last form, called botulismus, is produced by diseased meat in which is to be found the bacillus botulicus. The second form is also due to the ingestion of the flesh of diseased animals. Similarly, milk poisoning may be due to the use of milk from diseased animals, or to the fact that the milk has spoiled. Many cases of auto-intoxication (ptomaine poisoning?) are improperly so-called. It is at least questionable whether putrefaction of albuminous substances in the intestine can produce symptoms of poisoning. The indol, phenol, skatol and sulphuretted hydrogen produced by the ordinary bacteria of the intestines, are comparatively harmless in their action, or perhaps it is more accurate to say that the body is accustomed to them and so has a degree of immunity.

The subject is an interesting one, but needs a further investigation.

The opinion is now universal that it is not impossible to destroy bacteria in the intestines. In order to accomplish this a medicine would have to be very slowly soluble in the stomach, so that it might reach the intestines unchanged. The claims of the various manufacturers of intestinal antiseptics have no foundation outside of the minds of those who write the advertisements. Calomel acts probably solely as a laxative. The best treatment lies in the washing out of the stomach and the use of laxatives. A change of diet is also beneficial.

In the discussion of this paper, Stern said that he had disproved by experiment the possibility of intestinal antiseptics as secured by giving drugs, according to the claim set forth by Bouchard. Nevertheless, there is a certain amount of prevention of bacterial action to be obtained by the administration of antiseptics, notably of calomel. Calomel stools will sometimes contain so much of the drug that after standing several hours there is a great diminution of the number of the bacteria in them, or there may, indeed, be destruction of all the bacteria contained in them. It is, therefore, going too far to say that the disinfection of the intestine is absolutely impossible.—*Med. News*.

NEW DIAGNOSTIC SPOTS OF MEASLES ON THE BUCCAL AND LABIAL MUCOUS MEMBRANES.—Henry Koplik, in the *Med. News*, says that every case of measles is accompanied by the development of peculiar spots upon the mucous membrane of the lips and cheeks. These consist of small, somewhat circular, spots, which become bluish-white toward the center. Later the circular outlines disappear and the spots coalesce, leaving the mucous membrane of a somewhat darker color, studded over with these bluish-white spots. This appearance commonly shows itself from one to five days before the breaking out of the disease. With the appearance of the eruption this sign gradually disappears. It is claimed by the writer that the sign is of differential value in distinguish-

ing other eruptive diseases, notably scarlet fever and German measles. The examination must always be made by daylight and with good illumination.—*Ex*.

AMPUTATION OF THE FALLOPIAN TUBES.—Dr. George Ben Johnson says that the uterine tubes should be amputated in:

Extrauterine pregnancy, whether ruptured or unruptured, if the tube is much enlarged and altered.

In kinks and strictures, if these are numerous, decided and accompanied by dense adhesions, because having established by operation the previousness of the lumen under such conditions, it cannot by any means at our command be maintained, and may be followed by either hydro- or pyosalpinx.

In hydrosalpinx of either the follicular or flowing varieties, for the reason that the naked eye cannot define the limits of the former, and the latter will yield to no other treatment. In simple hydrosalpinx if the tube is greatly distended, its wall much thinned and in the presence of adhesions.

In pyosalpinx in every instance where the infection is other than gonorrheal, and in these if the abscess cavity is large and tube walls much impaired. Indeed, attempt to save a suppurating tube is rarely justifiable.—*Richmond Jour. of Prac.*

ERYTHEMA ENEMATOGES.—At a meeting of the Clinical Society of London, Dr. F. G. Still read a paper on "Enema Rash in Children." (*The Lancet*.) The rash has a characteristic appearance and course, as was apparent from the study of twenty-six cases which occurred at the Hospital for Sick Children, Great Ormond street. Usually a bright red patchy erythema appeared, especially on the front of the knees, the backs of the elbows, the buttocks and the face; in some cases, however, the rash was scarlatinaform, or the two forms might be combined. It appeared most often from twelve to twenty-four hours after the enema, and lasted usually from twenty-four to forty-eight hours; there was rarely,

if ever, constitutional disturbance; the amount and time of retention of the enema and the duration of the preceding constipation did not seem to affect its occurrence. Scarlet fever, r  theln and measles were the exanthems for which an enema rash is most likely to be mistaken, the absence of constitutional symptoms, of sore throat, coryza and pyrexia serving to differentiate, in addition to the occurrence just after an enema and the atypical distribution of the rash.—*Albany Med. Annals.*

THE RESULTS IN ADMINISTERING THE ANTITOXINE OF DIPHTHERIA AS AN IMMUNIZING AGENT.—A series of experiments were conducted in the children's hospital, Washington, D. C., by Dr. S. M. Adams to determine the value of the antitoxine of diphtheria as an immunizing agent, and he gives the following conclusions as the result of the observations:

First.—It is impossible to draw any definite conclusions as to the value of the immunizing dose of antitoxine. I am convinced, however, that the dosage was too small, and that if more units had been given better results would have been obtained.

Second.—The average duration of the immunity, as revealed by the observations, conforms with that obtained by other observers; we seem warranted in asserting that the larger the immunizing dose, the longer the duration of the immunity.

Third.—The immunizing dose of antitoxine has no injurious effect upon the kidneys.

Fourth.—Urticaria appeared in two cases, which was the only pathological effect observed.—*Archives of Pediatrics.*

TECHNIQUE FOR INTRACEREBRAL INJECTIONS.—Albert Kocker recommends the following method of administering intracerebral injections. After shaving and cleansing the anterior half of the scalp, the point at which the injection is to be given is determined with the aid of a craniometer. The fluid is to be injected into the lateral ventricles, and in so doing the motor centres should be

avoided. It has been found that a point two and a half to three centimetres from the bregma meets all indications. After cocainizing the scalp in this region a bone-drill is applied at the selected point, and a hole drilled through the scalp and cranium; upon withdrawal of the instrument the hypodermic syringe is inserted and the medicated fluid injected into the lateral ventricles. The method is so simple that it can be employed without any difficulty in practice outside the hospitals. The author cites a case of tetanus, in a 12-year-old boy, with whom he carried out the simple operation with great satisfaction, two intracerebral injections of tetanus antitoxin having been administered.—*Central. fur chirurgie.*

CONSTIPATION IN INFANTS.—Constipation in infants is the practitioner's bugbear. He recognizes the inadvisability of the habitual administration of laxative drugs to the young, but is often driven to countenance their use by the paucity of the resources at his disposal. It is important to bear in mind that constipation in infants is due, in a large measure, to the element casein, which, if it is present in milk in larger quantities than normal, as compared with the fatty elements, tends to interfere with the due performance of the digestive functions. A child fed on normal casein, but with a low portion of fat, will probably be constipated. In breast-fed children it does not follow that the proportions of casein and fat are normal, for the maternal supply may be faulty in this respect. Disturbances of health, especially in the direction of indigestion on the part of the mother, will necessarily be reflected in the composition of the lacteal secretion, as can be demonstrated by analysis. The first step, therefore, must evidently be to regulate the habits and life of the mother. She must be placed on a diet of fresh meat, fresh vegetables, and freshly cooked fruit, with due provision for regular exercise and restriction in the matter of tea drinking and other dietetic irregularities. This *r  gime* will diminish the proteid and increase the fatty constituents of the milk,

and will go far to rid the infant of the tendency to constipation. Should it fail, the best treatment for the child is the administration of cream in doses of from one to two teaspoonfuls in warm water from time to time just before the periodical meal.—*Medical Press and Circular*.

ENTERIC FEVER.—Dr. William Cecil Bosanquet, in an article on "Notes on Two Hundred and Fifteen Cases of Enteric Fever" (Charing Cross Hospital) published in the *British Medical Journal*, refers to the treatment employed as follows: "As a rule, treatment was expectant and consisted of liquid diet, absolute rest, and attention to symptoms. The routine medicine was diluted hydrochloric acid, with syrup of orange and water. Excessive fever was treated by tepid, cold, or iced sponging. Ice-cradling was also employed with less visible benefit. In one case treated by raising the bedclothes on a cradle, the patient died of double pneumonia. Antipyretic drugs were not frequently used, with the exception of quinine, which appeared beneficial in some cases. Of antiseptics, turpentine was most frequently relied upon, and was taken well in most instances. The same cannot be said of naphthalene, which frequently caused sickness. In at least one case the pills in which it was contained were persistently passed in the motions unaltered. Antityphoid serum was used in a few cases without visible effect. In one of these cases a relapse subsequently occurred."—*Medical Record*.

BLENNORRHOEAS NOT CAUSED BY THE GONOCOCCUS.—Axenfeld calls attention to the fact that while the majority of blennorrhœas are caused by the gonococcus, cases do not infrequently occur in the etiology of which other organisms are concerned—for example:

(1) Diplococci, which are morphologically indistinguishable from gonococci, and are frequently found, like them, within the cells, but which do not decolorise by Gram's method, and grow like staphylococci on ordinary media at the temperature

of the room. Attacks of blennorrhœas caused by these "pseudo-gonococci" are, as a rule, milder and shorter in duration than the ordinary form.

(2) Pneumococci. The diagnosis may be made by microscopic examination alone. The cornea in these cases is seldom affected, and recovery is rapid, sometimes by a sort of crisis. The incubation period in infants has not yet been determined, in adults it is about four days.

(3) The bacillus of Koch-Weekes may set up an acute conjunctivitis, but it is rarely met with. The small size of the bacilli which decolorises with Gram is characteristic.

(4) Axenfeld has seen two cases of conjunctivitis caused by the *B. coli communis*. The condition resembled that of a moderately severe gonococcal blennorrhœa, but in each case remained one-sided.

(5) He has also had one case (in a child 5 days old) of double diphtheritic affection of one cornea, which quickly improved after antitoxin was injected. The cornea, it is to be noted, improved much less rapidly than the conjunctiva, a fact which may be explained by Coppez's observation that the cornea is not affected by the diphtheria bacillus directly, but by accompanying pyogenic organisms.

(6) The author has also seen two instances of well-marked blennorrhœa in which no bacteria were found at all. These he ascribes to chemical irritation.—*Deut. Med. Woch.*

SUMMER DIARRHŒA IN INFANTS.—As summer diarrhœa is so apt to be of a putrefactive nature, all agree upon the necessity of completely clearing out the gastro-intestinal tract as a necessary start in the treatment. In most cases when the physician is called, the stools are loose and there may be vomiting. By at once stopping all milk, the stomach is soon emptied, and the principal indication is to clear out the bowel. If vomiting continues, draughts of tepid water may be administered, which, when rejected by the stomach, wash out that organ. I do not believe that it is often necessary to

wash out the stomach with a tube. Sometimes when there is excessive irritation of the stomach, with much production of mucus, one washing out, however, will give relief. I usually employ tablet triturates of calomel, gr. $\frac{1}{8}$ every hour until six or eight have been administered. These small doses act as a sort of stimulant to the bowel, increase glandular activity, and usually effectively clear out the canal of its fermenting contents. The drug is also supposed to have some anti-fermentative effect. A good sized dose of castor oil is also effectual, and is followed by a sedative effect on the mucous membrane. The drug that I have found most useful in the summer diarrhoea of infants is the subnitrate of bismuth in large doses. As far as I have observed, the subcarbonate, salicylate, and subgallate of bismuth and beta-naphthol bismuth have no decided advantage over the subnitrate, which is everywhere procurable.—*Chapin, The Medical News.*

TEN CASES OF CEREBRO-SPINAL FEVER.—Doolittle (*Med. News*) reports ten cases of epidemic cerebro-spinal meningitis. Three of the patients were between eighteen and twenty-eight and seven between four and eleven. All were in previous good health. No two were of the same family though five cases occurred on the same street, within a distance of two blocks. Five cases were fatal, a mortality of 50 per cent. The onset in nine cases was sudden, in one it was preceded by headache for two or three days. Vomiting and headache were present at the onset in every case. The pulse was rapid, the respirations increased and the temperature irregular in all. Vomiting, pain in the side, headache, photophobia, delirium and herpes labialis were present in every case. Spinal rigidity and cervical tenderness were rarely present before the third or fourth day. General hyperesthesia was noted in five cases and pain in the abdomen in four. Muscular twitching was generally present. No paralysis followed recovery. Pneumonia was a complication in four cases; all were fatal. Albumin was

present in the urine in every case. Swelling of the joints was noted twice. No bacterial examination was made.—*Med. Stand.*

LUMBAGO AND SPRAINED BACK.—Dr. J. Schneck (Railway Surgeon) gives the following differential diagnosis between muscular rheumatism and sprained back:

MUSCULAR RHEUMATISM.

1. History of myalgia.
2. Patient underfed or overworked.
3. History of exposure.
4. Pain often confined to one side.
5. Pain and tenderness greatest in fibrous portion of muscles.
6. Often a history of malaria.
7. Usually no fever.
8. No shock or vomiting.
9. History of a sudden jar or sprain not necessary.

BACK SPRAIN.

1. Not necessary.
2. Usually the contrary.
3. Not necessary.
4. Usually both sides.
5. Greatest at tendons.
6. Not necessary.
7. Fever usually present.
8. Often present.
9. History of a sudden jar always present.—*The Medical Standard.*

ASTHMA FROM ABSCESS OF THE ANTRUM.—Dr. Charles W. Richardson (*Laryngoscope*) reports two interesting cases of asthma, in each of which complete relief was obtained by evacuation of an antral abscess. The first case was one of several years' standing, in which the breathing was extremely difficult by day as well as by night. When treatment was commenced she was in a critical condition, presenting marked symptoms of sepsis. Evacuation of the pus gave almost immediate relief in breathing, which did not return until the cavity commenced to refill. A few weeks' treatment effected a complete cure. The second case showed even more marked physical depression, the breathing being so embarrassed that Dr. Richardson dreaded the operation of opening the

antral cavity. Within fifteen minutes the improvement in breathing and evidence of relief was marvelous. This patient has had several recurrences of the asthmatic attacks, which immediately disappear upon re-opening and cleaning out the abscess cavity.—*The Medical Standard*.

Notes and Comments.

A BACTERIOLOGICAL TRAGEDY.

A gay Bacillus, to gain him glory;
Once gave a ball in a laboratory.
The fête took place on a cover glass,
Where vulgar germs could not harass.
None but the cultured were invited,
(For microbe cliques are well united),
And tightly closed the ball-room doors;
To all the germs containing spores.
The Staphylococci first arrived—
To stand in groups they all contrived—
The Streptococci took great pains
To seat themselves in graceful chains;
While somewhat late and two by two,
The Diplococci came in view.
The Pneumococci, stern and haughty,
Declared the Gonococci naughty,
And would not care to stay at all
If they were present at the ball.
The ball began, the mirth ran high,
With not one thought of danger nigh.
Each germ enjoyed himself that night,
With never a fear of the Phagocyte.
'Twas getting late (and some were "loaded,")
When a jar of formalin exploded,
And drenched the happy dancing mass
Who swarmed the fatal cover glass.

Not one survived, but perished all
At this Bacteriologic ball.

J. Lee Hagadorn, M. D., Los Angeles, in
Southern California Practitioner.

CREMATION OF LAWSON TAIT.—According to the *Lancet*, the remains of Mr. Lawson Tait were cremated at Anfield, Lancashire, and the ashes removed in an urn to be deposited, in accordance with his testamentary wishes, in Gogarth's Cave, an ancient Welsh burial ground at Llandudno, Wales.—*N. Y. Med. Jour.*

HOSPITAL'S RESPONSIBILITY FOR A NURSE'S NEGLIGENCE.—According to the *Dom. Med. Mon.*, a woman was sent to St. Vincent's Hospital to have an operation performed. She was given ether, and after regaining consciousness after the operation, she complained of pain in one leg. It was found that a hot-water bottle was lying on the leg, and it was

claimed that it had caused injuries which had resulted in permanent disability. The patient sued the hospital for \$30,000 damages. At the trial the case was dismissed, the judge holding that the hospital could not be held responsible. The case was appealed, and now the Appellate Court has handed down a decision that the ruling of the trial judge was bad, and that a hospital cannot escape responsibility in that way. A new trial has been ordered.—*Ex.*

DR. BULKLEY'S LECTURES ON DISEASES OF THE SKIN.—We are in receipt of an announcement by the governors of the New York Skin and Cancer Hospital, that a second course of clinical lectures on Diseases of the Skin will be given, by Dr. Bulkley, in the out-patient hall of the hospital, corner of 19th St. and Second avenue, on Wednesday afternoons, at 4:15 o'clock, commencing November 1st.

We were not able to attend any of these lectures last year, but from those who were there we learn that large numbers availed themselves of this opportunity of getting personally acquainted with this difficult branch of medicine. As is well known, Dr. Bulkley for many years gave similar courses in the New York Hospital, and many will recall the simple, practical demonstrations he gave, with abundant therapeutical suggestions. The same methods were followed in the course last year, many cases were presented at each clinic and commented on, and each disease further illustrated by his large collection of life-sized casts from the celebrated Hospital St. Louis collection in Paris, together with a very great number of colored plates and photographs; of these he has, perhaps the largest collection in existence, including all the atlases, besides hundreds of photographs, original water color drawings, etc.

In calling attention to these lectures we cannot refrain from commending the plan here employed of utilizing the abundant clinical material found in dispensaries and out-patient departments of hospitals. It has always seemed a shame that this vast mass of material should not be of more benefit to the general medical profession, instead of only to the

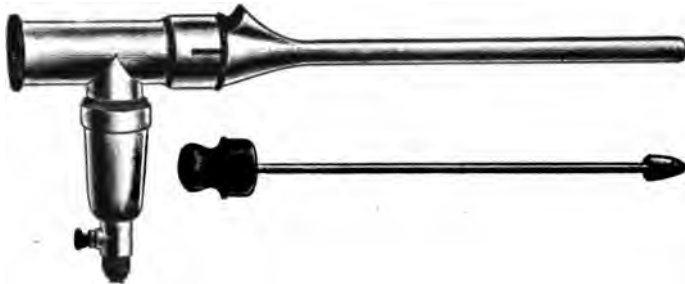
few who are fortunate enough to secure the public positions. If more of those engaged in thus treating the poor would make their clinical material thus serviceable to the profession, there would be less reason for the strong reaction which has arisen against the abuses connected with medical charities. We congratulate the governors of the New York Skin and Cancer Hospital on their broad-mindedness in thus favoring the cause of medical education.

—:o:—

Therapeutic Notes.

THE DOW URETHROSCOPE.—There has been a great demand for a urethroscope to which a light could be applied in such a way as not to interfere with the use of the instrument. Many attempts have been made to apply the light at the end of

right, in every sense of the word, for the work that it is intended to do. The opening in the side of the tube allows the free use of small instruments, and applications of caustic or acids can be made exactly where they are needed. Our price is very low, considering what other instruments of a similar nature sell for, being about one-third what the English or French instruments cost, landed. Each instrument is supplied with two tubes and two lenses, one for urethroscope work and the other for cystoscope use. They are packed in a neat leather case. Extra tubes of special size can be supplied upon order. The instrument can be used with any of our portable cases or any other case or street current appliance that will give $3\frac{1}{2}$ volts and thirty-five one hundredths amperes of current. No physician or surgeon who has work to do in this line, and who is looking for the best results in his



the tube and all have met with failure for various reasons, mainly on account of the heat generated when a light is confined in such a small space. Our new urethroscope has the light where it belongs, entirely outside of the urethroscope tube, and placed in such a way that it does not interfere with the vision or the working of any instrument small enough to insert into the tube itself. The tubes are made so that they can be attached or detached in a moment and can be sterilized the same as an ordinary tube. This is an important feature and an absolute necessity in an instrument of this kind. We have spent months of work and a large amount of money in perfecting this instrument, being constantly in consultation with some of the best medical men in this particular line in the country.

The instrument we are now offering is an entirely new idea, and is

practice, can afford to be without this modern instrument.

—:o:—

EXOPHTHALMIC GOITRE AND HYSTERIA.—At a meeting of the Medical Society of the Hospitals, M. Debove reported the case of a patient suffering from exophthalmic goitre and cured by iodine injections. The speaker believed that the goitre was of hysterical origin and that this is the explanation of the remarkable success of the treatment. He considered as an error the statement of most nosologists that exophthalmic goitre is a morbid entity. The symptoms of Basedow may occur in consequence of various lesions. Certain cases, but not all, may belong to surgery; we should occupy ourselves with the treatment of exophthalmic goitres, and not of exophthalmic goitre.—*Le Progrès Médical*.

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THE TREATMENT OF CONSTIPATION.

A Clinical Lecture Delivered at the Hospital College of Medicine, Louisville, Kentucky.

BY JOSEPH M. MATHEWS, M. D., LL. D.,
LOUISVILLE, KY.,

Professor of Surgery and Clinical Lecturer on Diseases of the Rectum; ex-President of the American Medical Association; President Kentucky State Board of Health, etc.

GENTLEMEN: During the present session of the school, which is now nearing its close, you have witnessed operations for nearly every known disease of the rectum. I am sure that you are convinced now, if never before, of the absolute necessity of giving some special study to this class of affections. I trust, too, that by this clinical demonstration you will have been profited sufficiently to do many of these operations, thereby relieving a large class of sufferers, a class, too, which has been wonderfully neglected in the past by the profession. You know how common it is for all such affections to be designated as "piles," and the patient to be assured that an ointment will effect a cure. Your experience here will prove to you what an error it is to so classify these troubles. You have seen at these clinics men and women whose lives have been wrecked by the want of proper treatment. Need I mention such formidable diseases of the rectum and colon as tuberculosis, syphilis and cancer, or the so-called minor affections, as hemorrhoids, fistula, proctitis, ulceration, stricture, prolapse, polypoid growths, eczemas, pruritus, etc. Let me beseech you, therefore, not to look too lightly upon this class, but at least give them the benefit of a careful examination before you dismiss them. As the last clinic to be held this session I have summoned a number of patients who are not seriously ill, nor do they need any surgical operation. You see here some aged, and some middle aged, while here to my

right is a very young person. Each one of these is a subject of that very common, and, what is generally regarded, very simple ailment—*constipation*. Before I begin to explain the condition of these patients, or this class of patients, permit me to say that constipation is a relative term. What is constipation to one is not constipation to another. Very often you will hear a person say, "If my bowels do not move every day I feel badly, headache, languor and tired." Another in apparent good health, will inform you that his or her bowels move only on every second, third or fourth day. The late Dr. D. W. Yandell once told me that a patient, in describing her trouble, said that so far as her bowels were concerned she was all right, as they moved with perfect regularity, *every two weeks*. I have made mention to you of a case treated by me and which is fully described in my work on "Diseases of the Rectum," a young lady whose bowels moved only once every three months, four times a year.

I do not wish you to be impressed with the idea, either, that constipation is a simple thing, for to the contrary, it is often a very serious affair. I once heard an old physician say that "if his bowels moved in the morning he was sure that he would not die that day." As he is now dead I have wondered "if his bowels moved that day."

Let us for a little time consider the physiology of defecation. The fecal mass has the cæcum as its starting point, and when "a call of nature" takes place it means that a peristaltic wave occurs, which moves this mass rapidly through the colon, dropping it into the sigmoid flexure, thence into the rectum. If the "call" is heeded by the individual an "action" is the result. If, through false modesty, attention to business, or general laziness, attention is not paid to this effort of nature, then the watery constituent, which is the greater, is absorbed and carried into the circulation. In consequence we have an

auto-infection which may prove of serious import. You can readily understand that by the absorption of the fecal mass, a poison, that the whole general system would be deranged. The red corpuscles of the blood are diseased, altered in color and lessened in power. Hence a sallow complexion, dark rings under the eyes, cold extremities because of less supply of oxygen; lethargy due to vitiated blood and enfeebled corpuscles. The system is not nourished, hence the loss of flesh; the diseased blood circulates through the nervous system, and there is in consequence nervous depression—we might say *nervous exhaustion*—the pulse is slow and easily compressed; the organs of digestion and assimilation are lowered; there is loss of memory, no concentration of thought and a great disposition to drowsiness. Notwithstanding that these patients are generally “sleepy,” they are not relieved by sleep. All the functions are unsatisfactorily performed. If this condition is not relieved, disease and suffering must be the result. There is another phase of constipation that I would have you consider. We have stated that the liquid contents of the fecal mass is absorbed, the solid portion remains in the flexure and rectum. Daily and weekly this dried mass is added to, and in consequence we have the whole pelvic circulation deranged; external piles are produced, internal piles are made to bleed; atony of the coats of the bowel takes place, congestion, inflammation and ulceration may result. Truly, then, constipation is no “light” matter. What, then, shall we do for this condition? I once heard a doctor say that he would give a thousand dollars for a “specific” for constipation. I really believe the investment would have been a good one, when we consider how many people are thus affected.

Before attempting to map out any line of treatment I wish to impress upon you that you should diagnose between what is known as *obstipation* and *constipation*. The former may arise from a mechanical cause, as an irritable and contracted sphincter, a stricture or growth in the rectum, and some believe that the valves of the rectum play a part here. Of course, if either one of these conditions are detected you should turn your attention to their removal, for the obstipation is only secondary to them. I have relieved many cases of so-called constipation by dilating the sphincter muscle. But what should be done in a medical way to eradicate this condition?

Let me say that you will find as most excellent adjuvants in the treatments of many of these patients: electricity, massage of the abdomen, cold baths and exercise. Every physician seems to have some favorite prescription, in the form of pill or solution, but they are constantly informed that “they have lost their power.” Of course you have heard that the “regular habit” should be indulged in; that enemas are good under certain conditions, and a pill is necessary. But do such effect a cure? Very rarely. Each case must be studied as an individual one. Fat people as well as the lean are affected in this way—the young as well as the old. Women are more given to the habit than men, and I believe the reason to be that they are possessed of a womb. You will often find that a displaced uterus, or an enlarged one with adhesions, is responsible for the constipated condition. It is common with young school girls, who in the rush to get early to school neglect the very important duty of having their bowels move in the early morning. Among the serviceable drugs in the treatment of this affection you will find the following: cascara sagrada, sulphur, belladonna, nuxvomica, sulp. iron, buckthorn, ipecac, magnesia, the mineral waters, and many others either alone or in combination.

But let me impress upon you the necessity of making a more thorough study of such a case. If the patient who consults you is really desirous of getting well he should at least give you a fair chance to cure him. Supposing then that you have such consent, I would advise you to proceed in the following way. First try and ascertain what is the *cause* of the constipation. In this connection, I wish to state that after an examination and observation of these cases extending over twenty years, I am forced to believe that the majority of them have as a basis a constitutional derangement. In trying to solve the problem, it was observed that many of these patients were of a rheumatic or gouty diathesis. Acting upon this hypothesis, I have treated them by combating this special trouble and have found that in many cases the constipation would take care of itself. There are many preparations that you can use for this purpose, but the best is some form of lithia. Waters containing this salt will be found of service if taken in large quantities and for a long period of time. However, in my own practice I prefer to use the drug in a more concentrated form. I have, therefore,

been using for some time a preparation of lithia known as thialion, with a marked degree of success. I direct that it be taken in teaspoonful doses given in a full glass of hot water, before each meal. My theory is that in the rheumatic or gouty subject the intestines are brought under the same conditions that the disease or diseases are made manifest in other portions of the body. The muscular coat of the intestines is particularly affected by this gouty condition, and in consequence loses its contractile power. Anyway, I have cured patients of the confirmed constipation habit by this drug alone. To proceed, I would say to the patient that he must submit to my directions. You will find that in lieu of the rectal enema, that if a *high* enema is given through a Wales bougie, say of a half to a gallon of water two or three times a week it will be much more satisfactory. The object is to replace the amount of water which has been lost by absorption of the feces. A fruit diet, together with the drinking of large quantities of water should be enjoined. Massage of the abdomen by the patient himself who should be taught the route of the colons, should be advised. The sweets should be forbidden and only plain, nutritious diet observed. I consider the administration of drastic purgatives harmful rather than beneficial. If you will watch this class of patients as carefully as you would any other chronic one, you will be awarded by success. I beseech you not to get into the habit of prescribing for them in a routine way, for if you do they will soon desert you and go elsewhere, besides you will do them no good.

DIURETIC.—

℞ Strychninæ sulphatis, gr. j.
Caffeinæ hydrochloratis, 3 j.
Pulveris digitalis, gr. xxx.

M. Disp. in caps. No. 60. Sig. One capsule every three or four hours.—*Ex.*

LARYNGEAL TUBERCULOSIS.—

℞ Zinc chloride solution, 2-5 per cent.

Sig. Use by the sclerogenic method of interstitial injection.—*Castex, Med. Rec.*

DRY PLEURISY.—

℞ Tinct. aconiti, *m* x.
Spir. æth. nitrosi, 3 ij.
Liq. potass. citratis, 3 iij.
Syr. tolutani, q. s. ad 3 iv.

M. Sig. Two teaspoonfuls every hour.—*Med. Rec.*

RECONSTRUCTION OF THE PELVIC STRUCTURES INCIDENT TO LESIONS OF THE PERINEUM.

BY HENRY O. MARCY, A. M., M. D., LL. D.,
BOSTON, MASS.

WHEN in London some time ago, the plastic repair of the pelvic structures was under discussion. One of the most distinguished surgeons said to me: "You will at least grant that we have settled upon the better methods for the restoration of the perineum," and yet, on further inquiry, I found that he advocated his own peculiar operation as the best and disagreed with every other writer on the subject. I am quite sure that the methods in practice by distinguished operators differ essentially, both in principle and technique, and that which is of the most importance, the resultant, is often defective and unsatisfactory. I cannot help thinking that this is due primarily to an imperfect knowledge of the structures and functions of the parts involved. Of the structures, the anatomy of the pelvic floor in woman has very generally been imperfectly described and studied.

I review my own publications on this subject with more than ordinary satisfaction, since they may be considered as progressive phases in the study of a problem which has occupied more than an ordinary share of my attention for a number of years, and to what I now offer, although perhaps not conclusive or final, I invite your consideration and earnest criticism.

All good surgery must be based on a thorough knowledge of anatomy and while this is essentially true in the consideration of every operative measure, as for example, the resection of a bone, or the ligation of a vessel, it is especially to be emphasized where the avowed object of the operator is the restoration of the injured parts to their original normal condition.

The surgical anatomy of the male perineum may be said to have been practically demonstrated and the subject long since exhausted. It is a *sine qua non* to the graduation of every medical student, and properly so, because of the importance of such knowledge in the practice of everyday life; but if this is necessary to the proper consideration of diseases of the male, how much greater the need of a familiar and accurate understanding of the pelvic organs, their relationship and supports in the female!

Here, in addition to the lower segment of the alimentary canal and its outlet, the position and retention of the bladder with its efferent passage, are placed the complex organs of reproduction, which necessitate a third and the largest of the openings through the pelvic floor. Not alone should this give additional interest and importance to the careful study of the female pelvis and its contents when in the exercise of the ordinary functions of life, but especially when we take into consideration the physiologic changes occurring during pregnancy and parturition—conditions so important and which occupy so large a share of the attention of the profession and often demand from its members the exercise of the highest skill and ability. If, happily, the recovery from parturition renders danger to life no longer imminent, nevertheless, every practitioner listens to the almost daily complaint of suffering dependent on injury of the parts involved and the reflex disturbances resulting therefrom.

The comparison of the component structures of the male and female pelvis shows a closer analogy than is at first apparent. The levatores ani in the male are inseparably blended with the sphincter ani. The transversi perinei join in a central tendinous line with the levators and sphincter in front of the anus; and anteriorly, between this point and the accelerator urinæ and erector penis there exists an irregular space, floored by the deep perineal fasciæ, called the triangular ligament of the urethra. This corresponds to the vaginal opening in the female. The accelerator urinæ, or ejaculator muscle, separated in the median raphé, is not very unlike the sphincter vaginæ muscle. The erector penis and erector clitoridis are similar in position and function. The transversi perinei are placed more obliquely in the male than in the female and are often less well developed.

The depth of the perineum is less than usually described. The axis of the anus, cutting that of the vagina at nearly right angles, leaves, in the external angle, an irregular flattened portion of tissue rarely, when examined on the living subject, more than one-half an inch in thickness. In the nulliparous woman this is clearly defined as a firm portion of the pelvic floor, and is composed of skin, fat, elastic and connective tissue, transverse muscles, sustaining fascia, and the anterior portion of the sphincter ani.

The vaginal side is usually slightly concave, and the rectal side convex, owing to the interblending of the sphincter ani. If the finger be carried just within the perineum proper and a little to one side, there can be felt the firm encircling band of the levator pubo-coccygeus, attached to each ramus of the pubis above and descending to join with the posterior fibres of the sphincter ani and coccyx. In the perineum posteriorly this is firmly interblended on either side with the transversus perinei muscles. These are under the control of volition in considerable degree, and acting conjointly, serve to draw the vagina forward onto the pubis.

The parturient and fecal canals are supported in the pelvic basin in close apposition, and the functional relationship is often such that the one may encroach on the other in such a way as to occupy nearly all the space accorded to both. This is especially true in parturition, when the rectal space is reduced to a thin folded tube; and often, in elderly women who have borne children, the rectum becomes saccated, pushing forward the posterior vaginal wall, forming a considerable sized external tumor. The pelvic floor is so formed and blended about these openings, that it not only properly supports the vagina and rectum, but materially aids in their physiologic function. In intimate relation to both are the bladder and uterus in their ever-varying functional activity and each is surrounded by a delicate plexus of nerves and vessels.

The sacral prominence throws a large proportion of the abdominal weight on the symphysis pubis and the recti muscles, in the support of the body, and thus relieves the pelvic basin and takes off undue strain on the pelvic floor. The rectum is rarely entirely empty, is circular in shape, serves the digestive apparatus in a measure as a constantly receiving reservoir, and, when not distended, may be felt from the vagina, as a rule, curving posteriorly. It is suspended and supported, slung, so to speak, by the levator ani muscles, which hold the vagina in their encircling loop. On the contrary, the vagina, entirely unlike the earlier diagrams, is flattened antero-posteriorly on itself, and in health its walls are, when at rest, ever in close apposition. The vagina joins with the vulva at right angles to its lateral opening at the entrance of its passage through the pelvic floor. The vulvar organs are all intimately

blended with, and go to form a part of the perineum proper. On each side of the vaginal orifice are the erector clitoridis, the bulbo-cavernosus, and the transversus perinei muscles, and these with the levator ani make up, in large measure, the pelvic floor. The bulbi-vaginæ and Bartholinian glands are covered by these muscles with their erectile plexus of vessels and abundant distribution of lymphatics and nerves.

The erector clitoridis and bulbo-cavernosus muscles with the transversus perinei join on each side to constitute the ovate muscular, vaginal orifice and, in their conjoined action, perform a very important physiologic function in sexual congress, often underestimated or ignored. Their impaired function frequently underlies certain reflex nervous conditions, distinctly pathologic, which are easily overlooked, but are the cause of much suffering and unhappiness.

The much discussed, so-called perineal body, has, in my opinion, misled some of our prominent authors into false positions and caused great confusion and misunderstanding among physicians. I have been criticised, in emphasizing the muscular floor of the pelvis, that I underestimate the importance of the variously distributed connective tissues and fasciæ. This is not by any means my intention. The superficial perineal fascia, in its deep layer in the male, as well as in the female, covers and encloses the transversus perinei muscles, forming strong ligamentous transverse bands, uniting in the perineum, designated by Savage as ischio-perineal ligaments.

The transversi are much more developed and cross the pelvic opening nearly at a right angle to a line drawn from the symphysis to the coccyx. At their central point of union they interdigitate or blend with the fibres of the levator loop in the posterior vulvar region and go to make up the central point of support in the floor of the pelvis. These muscles are interwoven and surrounded, re-enforced as it were, by very considerable bundles of connective tissue. The method of the interweaving of these structures is worthy of special mention, since it is only possible to secure elasticity of this strongest component of the human body by the interweaving of its fibres diagonally. I do not know that this fact has been brought into special emphasis by any one, but its importance is at once apparent and has an illustrative example in the

where the crossing of the connective tissue fibres diagonally permits of the shortening of the intestine, as in peristalsis, and its very considerable dilatation entirely within normal physiologic function. If, on the other hand, the connective tissue fibres were arranged for strength only, as in the tendons, elasticity would be almost entirely wanting.

The pubo-coccygei, acting in unison with the other muscles of the pelvic floor, draw forward and thus aid, not only in closing the rectum, but hold both it and the vagina in the anterior curve so important to be retained for the preservation of normal function. A horizontal section, made through the floor just above the sphincter vaginæ and posterior to the junction of the transversus perinei, shows the deeper fibres of the pubo-coccygeus, united in a loop behind the lower border of the rectum, holding it from the fixed point at the pubes as in a sling. This loop is connected with the transversus perinei, bulbo-cavernosus, erector clitoridis, sphincter-vaginæ and sphincter-ani muscles by strong layers of connective tissue, the importance of which for union and support cannot be readily overestimated.

On the posterior wall of the vagina, in its lower third, longitudinal muscular fibres are found external to the circular layer, and these intimately blend with the pubo-coccygeus, giving a firm support to the vaginal outlet, quite as the outer longitudinal fibres of the rectum unite with the deep layers of the sphincter ani. The physiologic action of the muscles thus grouped serve to draw the rectum forward toward the pubic arch and approximate it in close relation to the urethra, and this explains, in large degree, why the circular fibres of the vagina left free to act in other directions, are intra-folded laterally, making in cross-section an imperfect letter H, first pointed out by Freund. This intra-folding of the vagina at right angles to the axis of the vulvar outlet is very important in its relationship of support to the uterus and its appendages.

The vaginal axis is normally about parallel to the conjugate of the brim. The anal axis is nearly at right angles with the vagina and on a line with that of the uterus. The urethra, vagina and rectum are disposed in curves corresponding to the sacral line. Architecturally considered, these are the lines and disposition of supports adapted to give the least outlay of power to retain the organs in position. This is the more to be

emphasized, since the physiologic function demands mobility of the organs in conjunction, and also each independent of the other. Viewed from this standpoint, a still further analysis of the vagina, as a column of elastic support to the cervix uteri is of interest and importance.

We have already observed that the circular loop of the muscular fibres of the pubo-coccygeus, posterior to the anus, carries the rectum forward on to the vagina and changes the vertical vulvar outlet into an antero-posterior closure of the vaginal canal, and that this is again thrown into two lateral folds. The longitudinal muscular fibres external to the vaginal muscle and which extend, both in front and behind the vagina, along the distal third, are the chief causes in producing this intra-folding, constituting in large degree the so-called columnæ rugarum. The letter H-shape thus given to the vaginal column in section is well known in the arts as the form adapted to the resistance of vertical weight. This elastic column, retained in its shape and position by its basic vulvar and perineal support, is blended in its upper border with the cervical tissues. The union thus made with the uterus is at nearly right angles to the vagina and serves to hold the lower segment of the uterus backward, retaining that organ, like a ship at anchor, swung on its lateral supports, with freedom of mobility at its moorings. This vaginal support to the uterus is so effective in the normal condition that the cervix uteri is rarely displaced without there first ensues a change in the vagina. Although there are exceptions, of which the scope of this article will not permit the discussion, the general consensus of medical opinion is that the changes which occur in the vagina usually commence with those lesions of the outlet and contiguous tissues dependent on parturition.

A weakness in the base of support, the changes of muscular action which causes a drawing upward and backward of the posterior vaginal wall, with an eversion of the vulvar outlet, produce a change in the axis of the vagina, bringing it and the uterus toward a common plane, and then the cervix, instead of being held at right angles, becomes a wedge in line with the vaginal outlet, separating its walls.

This change in the position of the uterus causes the weight of the abdominal contents, deflected towards the pubis, no longer to fall on the organ posteriorly, but vertically, and little by little, following the sacral

curve in its descent, prolapsus with varying degrees of retroversion ensues.

Another anatomic fact, not usually taken into consideration, is the structure of the vaginal tissues and the relation of the vagina to the pelvic floor. The vaginal muscle is attached to the perineal structures normally only by a very loose interlacing of connective tissue fibres, and at its vulvar junction is posteriorly folded in on itself not unlike the sleeve of a coat, except that it is fitted to an elastic opening. A little fold of this tissue posteriorly constitutes the more or less pronounced hymen.

I have deemed it necessary to emphasize thus much the anatomy and physiologic function of the pelvic structures in woman, in order to make clear the anatomic type which the surgeon must aim to secure in the reconstruction of these tissues, more or less damaged in parturition. Even in an article of the present brevity, we must take into consideration the pathologic conditions which demand restoration. An elastic opening, which is too small normally to permit the passage of a body, must yield by lesion. Many of the minor tears, however of the perineum, are undoubtedly produced by the still prevalent custom of "supporting the perineum," which generally means a pressure from below upward, preventing the downward descent of the fetal head, in order to permit the escape of the occiput beneath the pubic bone. Naturally the tissues will yield where the tension is greatest, and this may be central or lateral, and may extend through the sphincter muscle into the bowel.

Generally the first important structure to yield is some point near the central union of the transversi muscles, and then the vaginal and vulvar structures rarely escape injury. The resultant is an injury and widening of the levator loop, and the drawing to either side by the transversi toward their respective origins. If the sphincter ani has not been injured, by a slow process, a rectocele almost necessarily follows. If the sphincter is torn through, as might easily be inferred, the pouching of the bowel cannot occur, and, as a consequence, the uterus is less likely to be misplaced.

Intelligently conducted operative measures are undertaken to restore the structures as far as possible to their normal standard. With this problem before the operator it would not seem difficult to make the procedure definite and comparatively simple. In a paper read before this

Section some years ago, on this subject, I threw on the screen about fifty photographic illustrations, in order to enable my audience to follow intelligently with me the different methods devised for the surgical repair of these lesions, and yet I am sure I did not include all, while many have been added to the list during the intervening years.

The first great point of difference lies in the selection of the operative field; shall it be on, through or behind the vagina? This opportunity does not permit a differential discussion of the question, but since the vaginal structures do not enter into the formation of the pelvic floor, it would seem wise to eliminate them as far as possible from the problem. To dissect them entirely away with a portion of the injured vulvar structures, as is the more common custom, is unwise, since they should be preserved for important physiologic purposes. To preserve them intact seems rational, since they are thus less injured and serve the subsequent important purpose of protecting the wound from infection. In order best to do this the dissection is carried through the cicatricial tissue laterally to the point on either side which marks its former attachment, and upward through the loose connective tissue, post-vaginal attachment, quite to the crest of the rectocele.

This vaginal flap is lifted forward by an assistant, and on examination the fibres of the levator loop are easily demonstrated. A careful inspection of the vagina before operation will enable one to detect a depression on either side, which marks the site of the separated, contracted transversi.

It is generally wise to extend the incision posteriorly on each side beyond the level of the anterior border of the anal opening, and laterally on either side by reflecting a small portion of tissue. The limit of this dissection is determined by the depth of the sulcus or depression, which is usually found posterior to the vulvar organs. This makes a wide, open wound which permits of the careful re-adjustment and reunion of the injured parts.

In this way only can the surgeon intelligently restore these structures to their former normal relationship. If this has been aseptically performed, and the aseptic condition maintained, primary union will supervene with complete restoration of function.

Thus briefly have I outlined what consider to be the essentials of the

operation. Technique may and should vary with different operators, since a man does his work best in the way most familiar to himself. This permits a somewhat wide digression as to variety of method. As ordinarily attempted, the dissection is not easy and is greatly facilitated in the following manner:

An assistant on either side separates the vulvar opening, while the operator introduces two fingers of his left hand quite into the rectum. Anterior to the anus a slight opening is made through the structures thus held tense, into which a knife with a small rounded end, obliqued to an angle of about 40 degrees on a firm handle, is introduced. Force applied in the line of the handle brings the cutting edge to an angle with the structures to be divided, and they are thus separated with ease and accuracy. After the cicatricial structures are divided the right and left angled Emmett curved scissors are introduced to complete the external incision. Then the division of a few bands with the scissors will permit of the anterior lifting of the vaginal muscle, and the operator for the first time is surprised at the ease with which the further separation to the crest of the rectocele is effected, often by the thumb and finger alone. By the aid of the fingers retained in the rectum, the bowel is protected from injury, and, once inserted, the surgeon retains them there until the operation is completed.

To me the *sine qua non* of the operation is the buried suture, and only by its use can a readjustment of the parts be accurately effected. Many surgeons prefer a curved needle and continuous suture. By means of this a lacing stitch can be applied from side to side for coaptation.

However, I still greatly prefer the needle fixed in a handle with large curve and eye near the point. The introduction of the first stitch is the most important. It must include the retracted end of the transversus in its association with the displaced levator loop. This being effected on one side, the suture is made to penetrate the junction of the vagina and rectum at the crest of the rectocele, and is carried across to include the transversus on the opposite side. The loop of the suture held by an assistant, the operator easily approximates the parts with it, and three or four continuous double stitches taken in this way—Marcy's stitch—reunite the most important structures. A fine continuous suture, introduced by a full-curved

Hagedorn needle, renders it easy to make complete deep coaptation of the surfaces laterally, while every stitch is buried in healthy structures. Even here we find the collodion seal is of value and makes an impervious dressing for one or more days. As soon as it is loosened it should be removed. A light dusting with iodoform is the only subsequent dressing needed. In this way it is easy "to build out" the structures so that the depression posterior to the vulva disappears.

The folding of the vagina anterior to the wound frequently results in a thin membraform wall closely resembling, months later, a slightly ruptured hymen. It would indeed be difficult, oftentimes, for an expert to determine that the woman was not a nullipara.

When the rupture, is complete, that is involving the bowel, the essentials of the above operation still pertain. The dissection, anteriorly, differs only in that there is a central rent through the separated vaginal sheath; posteriorly, in that the rent includes the sphincter ani muscle and extends in a greater or less degree up the rectum. The dissection here must be continued further down on the sides of the anal opening in order to reach the retracted ends of the sphincter muscle. The vaginal rent is united by a buried continuous tendon suture, introduced from side to side on its posterior dissected surface, the end of which is for a time left long and given over to the care of an assistant. In the same way the edges of the injured bowel are restored, and thus we reduce the conditions to those pertaining to an incomplete rupture of the perineum.

The remaining steps in the operation are the same as already described, with the exception that care must be taken to reunite the sphincter ani muscles.

The proper rejoining of the sphincter ani muscle is of the first importance, since otherwise the function of the lower bowel will be seriously impaired. Dr. Emmett emphasized this, years ago, and yet it is not seldom that cases are met with where the operative result is perfect except for a defective use of this muscle, and this from the service of good operators. The retraction of the circular fibres is much greater than usually supposed. The dissection must be sufficient to expose the retracted ends of the muscle and then the rejoining of these fibres must be made with accurate precision.

Vagino-rectal fistula is fortunately much less often seen now than

formerly, and yet when it does occur, even in the hands of our best operators, it proves one of the most troublesome conditions for cure. For many years I have treated it by the lateral separation of the structures as above described, closing the vaginal and rectal openings separately. Oftentimes, when a comparatively little tissue is left, it is easier to divide the sphincter and intervening parts to the fistula.

Following the description of this operation, one might at first infer that it was difficult and tedious. As a matter of fact it is simple and rapid, often completed within fifteen minutes. The convalescence is easy and rapid with very little suffering. I prefer that the urine should be drawn with a catheter during the first three or four days, and that hardened fecal masses shall not be permitted to accumulate in the lower bowel. Much depends, in securing primary union, on the subsequent care of such a patient by the nurse.

The operation is also a test of the surgeon's ability to make and maintain an aseptic wound in this, one of the most difficult parts of the body. Failure to secure good results under proper care is the exception and rare. I have operated several hundred times by this method. Recently I inquired of the head nurse in my hospital, "How many failures to secure a good perineum have occurred since you have been with me?" With seeming surprise at the question she replied, "Not one," and she has had supervision of my work uninterrupted for the last thirteen years.

In a paper* published ten years ago, on the repair of the perineum, I closed with the following as the essentials of my method:

1. The dissection of the posterior third of the vagina, *not its mucous membrane*, from its vulvar attachment, carried as deemed necessary into the recto-vaginal space, and the *retention* of this flap.
2. In lifting forward the vagina from its vulvar attachment, the retracted transverse perinei muscles with their connections are reached and reunited by deep buried sutures, making in this way a true restoration of the pelvic floor.
3. In rectocele with prolapse, the closure of the deep layers of the post-vaginal fascia by a continuous buried animal suture, taken either in single or double line stitches.

*"The Perineum; Its Anatomy, Physiology and Methods of Restoration After Injury." (Reprint from Trans. Am. Assn. of Obstet. and Gyn., September, 1896.)

4. The coaptation of all superficial surfaces by a buried animal suture, applied as a continuous stitch, taken from side to side, covering the wound, when dry, with iodoform collodion.

5. In rupture involving the sphincter, the lateral dissection, the joining of the rectal and vaginal edges with buried sutures, and then finishing the operation as in incomplete rupture.

I consider the closure of wounds aseptically by the buried animal suture, preferably tendon, my best contribution to surgery, and its application to the plastic repair of the pelvic structures is second in importance to few other operations.

SOME REMARKS ON THE CHOICE OF A RECONSTRUCTIVE AGENT AFTER SEVERE HEMORRHAGE.

BY E. E. HUTCHINS, M. D.,
BOSTON, MASS.

THOUGH the effects of a hemorrhage are of course proportionate to its degree, nevertheless it is a fact well established by physiologists that even after severe loss, the watery, albuminoid and saline elements of the blood are almost immediately restored by resorption from the surrounding tissues, particularly from the alimentary tract and lymphatic system. The red corpuscles, on the other hand are regenerated very slowly, and weeks may be required to restore them to their proper number, color and normal specific gravity; for, while other mineral substances are loosely dissolved in the fluid of the blood, the iron of the hemoglobin is closely incorporated as one of its elemental and vital constituents, without which the blood becomes practically functionless. Iron, therefore, has long been universally recognized as the hemopoietic remedy par excellence after any considerable loss of blood.

In regard to the systemic effects produced by severe hemorrhage, it will be remembered that normally the amount of blood in the body is only of such quantity that when one apparatus is in a state of functional activity, blood has to be withdrawn from other parts of the body. This is indicated by our daily experience of disinclination for active mental or physical exercise, when, after a full meal, there is a determination of blood to the alimentary canal and away from the nerve centers and muscles; and, contrariwise, of inability

to perform digestion well if severe muscle- or brain-work be persisted in nevertheless. "Consequently," says Dr. Mendelsohn, "we see after hemorrhage, bodily and mental lassitude, *inability to perform well the acts of digestion*, an enfeebled action of the heart and general relaxation of all the tissues."

It will be observed that our reconstituting agent in this instance must be one that demands little or no action on the part of the stomach to render its digestion certain. Though beef tea and meat extracts of all sorts are usually easily digested, their toxic character is now well understood, and such preparations are tabooed by the majority of physicians in cases where a hemoglobin-making agent is indicated. An eminent French surgeon not long since made the remark that "Beef tea is a veritable solution of ptomaines." Analyses show that it contains urea, uric acid, creatinin, and a variety of other toxic substances; and Grijns has demonstrated that solutions of urea have a most destructive effect upon red blood corpuscles: that the latter swell up and burst as they do when exposed to the action of distilled water. Common sense itself would seem to teach us, that an extract from the tissues of a dead and decomposing animal is about the last thing that ought to be given to a patient suffering from general debility, or when already struggling against the toxic influences of a flood of systemic poison. The conclusion is reached that beef tea is simply a solution of products whose energy has already been exhausted, and acts merely as an excitant without really augmenting the bodily energy to any appreciable extent.

The particular ferric preparation to be selected, therefore, as a reconstructive after hemorrhage, is a question of considerable interest and importance; but there is absolute unanimity of opinion to-day among leading clinicians concerning the superiority of organic iron over the various inorganic salts. Kunkel's experiments upon dogs (Cf. *Pflüger's Arch.*, LXI, 595) have demonstrated the fact that albuminate of iron is freely absorbed and readily assimilated into the very tissues of the body. It is well-known, however, that the albuminates when taken into the stomach, must, in order to be absorbed, first undergo the process of digestion before they are in the form of peptones, which latter are the only forms of albumen ready for immediate absorption. Hence, in all debilitated conditions of the

system when the digestive functions are weak and comparatively inactive, the administration of the *peptonized* albuminate of iron assures the immediate absorption of its ingredients without effort on the part of the stomach; consequently therapeutic results are more prompt and lasting. This is a fact that will, perhaps, be made more manifest as studied in the subjoined clinical cases, in which a preparation of the peptonized albuminate has been used with exceptionally gratifying results:

CASE I.—Mrs. H., American, æt. 45, mother of six children, was delivered by a midwife of a healthy male child April 3. Her last previous delivery had occurred seventeen years before. On both occasions she had suffered from profuse uterine hemorrhage immediately following the expulsion of the placenta—being in the last instance almost exsanguinated. Twelve hours after delivery, when the writer saw the case and the hemorrhage was practically checked, the pallor of skin and mucosæ was remarkable in its suggestiveness of the great depletion of blood the body had sustained. For three weeks the patient lay in a state of extreme exhaustion, during which time the bodily functions were almost totally suspended. She was quite unable to nurse the child, only a minute quantity of milk being formed. None but the most delicately prepared liquid foods could be supported by the stomach, and even such were sometimes rejected, when it became necessary to afford nourishment by the rectum. Iron poverty was plainly apparent, demanding relief; and it was likewise equally necessary to stimulate in some way the process of nutrition.

Blaud's mass, as well as liquid preparations of neutral iron and manganese was tried with this two-fold end in view, but results were totally unsatisfactory—the stomach remained refractory, and at the end of a month there was manifestly no improvement.

It was evident that, to be useful in this case, the iron remedy should be predigested, and in the form of peptones in order to be quickly absorbed from the stomach; and, furthermore, should be given in small doses to be *entirely* absorbed, leaving no portion behind to irritate either stomach or intestines. Fortunately such a preparation was suggested in feralboid, a peptonized albuminate of iron in tablet form which could be kept indefinitely. Four ($\frac{1}{3}$ gr.) tablets of this preparation were administered daily from this

time, at intervals of four hours each, and were not only readily retained by the stomach, but caused the patient to improve rapidly from the outset. The pulse became stronger, the breathing fuller, and a tinge of color gradually appeared throughout the skin and mucous membrane over the entire surface of the body. The most marked effect, however, was upon the digestive apparatus: the hypersensitiveness of the stomach quickly disappearing, and a desire for more substantial food frequently being expressed by the patient.

The treatment was continued in this manner for a month, during which time the patient not only regained health and strength, but became more vigorous than usual. Though the number of corpuscles or percentage of hemoglobin, was not estimated in this case, there can be no doubt as to their marked increase after the administration of the tablets, as indicated by an almost immediate change in the color of the skin from a decided pallor to an approximately healthy glow. The cause of so severe a hemorrhage in this case may evidently be traced to the sedentary life of the patient and a general relaxation of the system.

CASE II.—Michael F., Irish-American, brakeman, æt. 19, in perfect health, fell between two cars from the top of a moving freight train, the last car passing quite over his foot below the ankle, crushing it badly and causing a very profuse hemorrhage. Though the foot was eventually saved, many hours elapsed after the accident before surgical aid could be secured, during which time so great an amount of blood had been lost that the patient's life was at first despaired of. A careful estimate with the English instrument of Gower showed the hemoglobin to be but 52 per cent. of the normal, and the red corpuscles 2,800,000 per cubic millimetre. The patient was at once put upon one-third grain feralboid tablets, four daily for thirty days, at the end of which time he had gained noticeably in muscular vigor, ate well and began to take on his usually ruddy complexion. The corpuscular count was now again taken and registered 4,200,000 per cu. mm., the hemoglobin having increased to 80 per cent. The tablets were reduced to two per day, and after a fortnight's further treatment the patient was considered fairly convalescent; and, with the exception of his need of a crutch to get about, had practically recovered from the effects of his accident.

CASE III.—John R., American, carpenter, æt. 50, was taken on May 10,

with an unusually severe attack of epistaxis, from which he had been a frequent sufferer for many years. The flow of blood on this last occasion was profuse and continued many hours, requiring a thorough plugging of the posterior nares with cotton tampons before it could be successfully checked. The patient was left so weak and exhausted that he was obliged, much against his will, to take to his bed and submit to medical treatment. The first count showed 2,900,000 red corpuscles to the cu. mm. He was immediately put upon the sametables, prescribed in the same manner as in the preceding case. At the end of twenty days, treatment was stopped. The digestion had become perfect, a more amiable disposition appeared, and there was plenty of color in cheeks and lips, the patient's normal healthy glow being entirely regained. Examination of the blood at this time showed 90 per cent. of hemoglobin and 5,000,000 red corpuscles to the cubic millimeter. This rapid increase in the number of corpuscles in so brief a period is somewhat remarkable, and is a sufficient commentary on the value of the peptonized albuminate of iron as a restorative agent in cases of acute anæmia, when accompanied with absolute loss of both the hemoglobin and the red blood cells.

WHO SHALL OPERATE? WHAT SHALL THE PATIENT PAY?

BY ROBERT T. MORRIS, M. D.,
NEW YORK CITY.

“POST-GRADUATE medical instruction is more harmful than useful. It fills the country with amateur surgeons, half equipped ophthalmologists, and all sorts of men who have just enough knowledge to make them dangerous.” That is what a pretty well informed physician said to me the other day in the smoking compartment of a parlor car as we were whirling along toward a western city.

“No,” said I. “Society is responsible. Not any corporation or individual.” If the legislators of certain states allow men with defective education to practice medicine these men will mingle with highly trained men in the post-graduate arena, where the best and latest classified knowledge is taught. Shall we not speak in terms of science to the whole class? One might as well contend that legal principles are not to be taught the whole class at law school

because so many members of the class will shortly proceed to get clients into trouble. Our conversation turned to the questions “Who shall do major operations, and what fees should be paid for competent surgical services—who shall operate?” That depends upon the environment of the surgeon and of the patient. A certain general practitioner in a small town may be qualified to do a great deal of good work, but not a good deal of great work. His multifarious duties place a time limit upon the exercise of his capabilities. He may be endowed with all of the natural talents required by the surgeon, and yet be lacking in acquired opportunities. Nevertheless, as a general practitioner in a small town, he is often called upon to do emergency operations, and he must play the part of a hero or of a coward, according to the character that was born in him, and according to the degree of self culture that he has been inspired to apply to that character. The physician is a hero or a coward almost every day of his life anyway, and he knows it, and he is the only one who knows it. He has a case of strangulated hernia, a bullet wound of the brain, or an appendicitis with beginning peritonitis, and he must act or dodge. He has patients so poor that they cannot afford even the car fare to take them to the consultant whom the physician would choose, and he often puts his hand into his own pocket to help some poor fellow—unworthy perhaps, but suffering nevertheless. He will not do the best operative work, for that would assume that opportunity and experience are of little value. The world knows all about that, so let the question drop. Does the physician try to reduce the strangulated hernia by prolonged taxis? It is not the way to do it. He may reduce the hernia safely, but he is more likely to injure the bowel or to make an *en masse* reduction, and in any event the patient is left vulnerable for continuance or recurrence of the hernia. The physician's duty is to operate. If he dodges the duty he will still be in line with the ideas of some members of the family, and that will allow him to argue with his conscience, and the only judge will be his horse.

Does he treat the bullet wound of the brain without making the wound aseptic, and without trephining for drainage? Then he is rendering incompetent service. Does he treat the appendicitis case by medical means, and claim that he knows of some authority who advocates it?

Then he is backing away from duty, for there is no such authority to-day. His operative death rate may be large in such cases, because it requires much experience to reduce the death rate to small proportions, but the combination of natural talents and of willing hands will win without long training in many a fight against the *bacillus coli communis*.

All honor, then, to the general practitioner in the small town who does his best for emergency operative cases, and for the poor patients who must find help close at hand. He is true to his profession who is true to himself.

If, on the other hand, his motives are not altruistic, and he is ambitious for the prestige and the fees of skilled surgical work, a question of moral rights immediately enters. Will he operate upon patients who can have competent surgical services? Will he withhold from patients a knowledge of the fact that they can have such service? Then he becomes a dangerous man or a public benefactor, according to the method that he chooses for the architecture of his life work. He need not be a very good man, or even a public spirited man, and yet he may become a most potent public benefactor as a skilled surgeon, provided that he acquires the moral right to do major surgical operative work. How does he acquire that right? By a direct expenditure of large sums of money, and years of time in giving himself opportunity. By direct curtailment of general practice work, in which he has already become proficient. Is he unwilling to do this? Then he cannot become a trustworthy surgeon, for he is working under time limitations. One cannot drift into surgery to-day. It is definite, accurate work, almost mathematical in the precise application of principles, and demanding concentrated method for the acquirement of even a fair degree of the knowledge that is required by the surgeon who is to do the best work. If one does not do the best work—a few unnecessary deaths. The sum total of knowledge in separate fields of surgery to-day is so large that no man devoting himself closely to a special field can feel that he is comfortably master of the subject. If he tries to control the knowledge of a small part of a special field, take the matter of gall stones for instance, he can expend weeks of time in library work upon that one subject, and unless he does so his death rate will be just a little larger than the death rate of the man who makes better use of his

opportunities. What does "just a little larger death rate mean in surgery?" It means just a few more dead people. Who are these few more dead people? Honored fathers, blessed mothers, darling sons and daughters. These are the few more dead people of the man whose death rate is "just a little larger." No man can control any important field of surgery to-day if he is engaged in other kinds of work. Not long ago a physician said to me that he was a general practitioner, including surgical work. I am sure that he would not treat a perforation of the duodenum in the safest way. I am sure that he would not do the right thing for a case of wryneck dependent upon heterophoria. I doubt if he would cure a coccygeal fistula at the first attempt. I doubt if he knows the way to cure nocturnal enuresis in most of the little girl sufferers from this trouble. I know personally that he cannot do neat, pretty, conservative work in saving priceless ovaries and tubes that have been disabled by disease. Yet all of these things he would do readily if he were to give up general practice work, for he is a man of large capacity.

A physician has the moral right to operate for the sake of getting experience long before he has become proficient, provided that he is at work with definite plans for excluding all other kinds of work eventually. That is the principle involved. If he has no such definite plans, if he hopes to drift into surgery, if he has the intention of remaining an "occasional operator," then he is indeed a dangerous element in the community. The occasional operator is a man at work outside of his moral rights if he lives in a town where skilled surgical services are obtainable. Otherwise he is a hero and his self sacrifice in risking his reputation for the sake of suffering patients is commendable.

In some parts of the country there are surgeons who give and take commissions for referred cases. Should these men operate? I think not. The keenest and most delicate sense of responsibility is required by the surgeon for he is dealing directly with human life and human happiness. His motives must be as free and untrammelled as the motives of the jurist. A large part of his function must consist in determining that many a case referred to him for operation is not a case for operation. Cases that he refers to other authorities are to be referred to the best men irrespective of any personal interest whatsoever. The commission

teredo, therefore, must necessarily attack the human nature substructure of the surgeon in such a way as to undermine the very pillars and foundations of trustworthy surgical services. Any short cut to practice in a profession of high ideals must result in one's simply going around the hill and consorting with men who like himself are incapable of advancing by straightforward elevation. "*Qui se ressemblent s'assemblent.*"

It seems to me that the doctor who gives or takes commissions for work, gives an index to his whole character, and he is to be classed with the jurist who makes payment to a political party for the distinct purpose of obtaining preferment on the bench. Some of us may be old fashioned in our ideas, but the philosophy of Plato has not as yet become old fashioned and I believe that there is a perennial fountain of honor in the medical profession as enduring as the philosophy of Plato. The sun is sometimes obscured by the clouds of an area of low pressure, but it soon reappears as the same old fashioned sun.

Before leaving the question as to who should operate, we discussed another sort of operator. The man who is "almost ready" to operate, and whose patients fall through the weak structural plans of his indecision. A single case in point, to be brief. Two years ago a most estimable woman was found to have an incipient cancer of the breast. It was undoubtedly curable by proper operation at the time when it was discovered. Her physician was "going to operate upon it soon." Six months later the disease had progressed and her physician was still going to operate soon. The patient died of cancer of the breast a month ago. Why? She was the mother of a delightful young family. She was needed at home. She put trust in a physician who was "almost ready to operate." She could have gone to the city of Buffalo in about an hours ride, where skilled surgeons were obtainable, but she was neither cared for by her own physician nor referred to competent authority. Now her young daughters will not have the loving guidance of a mother. Her sons will not find home the most attractive place in the world. A beautiful personality has faded out of the community because of feminine trustfulness misplaced.

What Shall we Charge the Patient for a Surgical Operation?—Most of the surgeons who are entitled to large fees are the very ones whose interest in their work is so great that the fee seems an affair of minor im-

portance. It is after all a rather simple matter about the fee. It depends chiefly upon the environment of the patient and upon the known skill of the surgeon. If a man of large financial resources happens to sustain a compound fracture of the leg, and if he is in an out-of-the-way place where he cannot choose his surgeon—the surgeon whom he calls in his emergency and distress is to charge a very ordinary fee. A dignified fee, if you please, and one commensurate with the actual skill employed in making the wound aseptic, in properly suturing the bones, in correctly adjusting the muscle balance to avoid muscular spasm—in judiciously arranging a dietary and hygiene system for a robust man suddenly confined to bed. Let us say that the bill shall be \$500 for the primary work, and customary visit rates for subsequent visits. It is the patient's privilege to make a choice of surgeons, and if he is not in a position to make a choice, the surgeon called in an emergency has no right to force upon the patient a charge that has not been anticipated. We cannot take advantage of distress under these circumstances.

If, on the other hand, the man of sufficient wealth to pay for skilled surgical services has a chronic appendicitis subsequent to an acute attack, there is no hurry or emergency about making the choice of a surgeon. The patient is at liberty to make careful investigation of the work of various surgeons. He can learn of the comparative death rate and of the post-operative hernia rate of different methods of operation, and he can choose a surgeon whose proven success is an index to what the patient may expect. He avails himself deliberately of the best skilled services obtainable. He is making use of skill acquired at such labor and expense that the majority of the profession have been unwilling or unable to acquire it, and the surgeon under such circumstances may rightfully ask the patient to pay not five hundred dollars, not five thousand dollars, but ten times the latter figure if the patient is prepared to pay it without serious deprivation. Surgeons habitually undercharge for services. One of my personal friends, a lawyer who had just collected one hundred and twenty-five thousand dollars as his fee in a legal contest, told me that he never knew a doctor's bill to hurt any one. But I had. I had known conscientious and grateful patients to seriously deprive themselves in order to pay small bills, and a patient of mine once stole

some chickens in order to pay the bill of myself and Dr. K. At least that was the patient's explanation of the matter. It was very pathetic. It is this feeling that one may make a grateful patient suffer in order to pay a bill, that appeals to members of a humane profession, and this fear is recognized and taken advantage of by men who have been shrewd enough to amass means from which they can pay for skilled life saving services. Let us say that fifty thousand dollars is to be the fee for any appendicitis operation in which the surgeon's methods cause less discomfort than would result from any method of medical treatment. I would pay it myself in behalf of any member of my family if it could be paid without serious deprivation, because I know just what that sort of an operation means. There are not many patients who can pay such a fee, consequently we do the work for them and accept less than the services are worth. That is the principle. There is no greater demand in the profession to-day than the demand for physicians and surgeons who shall charge large fees for their services and make their services worth all that they cost.

49 WEST 39TH STREET.

CHRONIC DYSPEPSIA SUCCESSFULLY TREATED WITH H_2O_2 .

BY GEO. A. GILBERT, M. D.,
DANBURY, CONN.

THE CASE herewith subjoined is one of interest on account of its typical character, its long-standing, and its speedy recovery on the adoption of a rational treatment.

Peter H., æt. 40, Hungarian, farm laborer, applied for treatment at my office on July 1, 1899. He was a strapping fellow, mostly skin and bones, of about 170 pounds weight, and would not have been thought ill except for the prominent dark rings under his eyes, his injected conjunctivæ, and a drawn, hunted expression on his countenance, indicative of past trouble or imminent danger. The history he gave was somewhat as follows:

Six years previously, on his voyage to this country, he suffered from an attack of acute gastritis, attended with retchings of the most violent character. Soon after landing he recovered sufficiently to attend to his work; but he says that he has "never been the same man since." In all this long period he has not

eaten "a good square meal," nor enjoyed what he has eaten, the burning pain in the epigastrium, after meals, becoming so great occasionally that for fear of its repetition he has gone without food for two or three days at a time. Belching of enormous quantities of gas, too, is common with him soon after eating, thus evidencing the presence of undigested food with its resultant fermentation. The patient states, that in order to get relief he has spent all of his wages upon various doctors, specialists, quacks, nostrums, etc., and swears that he is worse to-day than on the day he first landed in this country.

On examination it was found that he was slightly feverish, pulse rapid, tongue flabby and heavily coated, while the teeth and entire cavity of the mouth were covered with a foul-smelling sticky mucus. That the stomach received, in the process of starch digestion, little or no assistance from the salivary glands of the mouth was plainly apparent. In deciding on the mode of treatment it was obvious that lack of the usual amount of gastric secretion must be met by restoring the physiological conditions upon which the secretion depends. In other words, in order to relieve the inflammatory condition of the gastric mucous membrane and restore the function of the peptic glands, antiseptics were required. The patient, therefore, was furnished with a flask of Ozonized water, made of one part Hydrozone to four of water, and directed to wash out his mouth every night and morning, thoroughly cleansing the tongue, teeth and gums of the unhealthy mucus and any pathogenic germs it might contain. To destroy the microbic elements of fermentation in the stomach and dissolve the tenacious mucus there, a mixture of one ounce of Hydrozone with two quarts of sterilized water was made, and half a tumblerful directed to be taken half an hour before meals. Having thus procured a clean surface in the stomach, the patient was advised to take immediately after meals, a drachm of Glycozone, diluted in a wineglassful of water, for the purpose of enhancing cellular action and stimulating healthy granulations. Of course he was ordered to select his food with care and eat regularly.

The result of this simple procedure was almost magical. Although for the first two or three days there was some discomfort after eating, this soon disappeared, and at the end of a fortnight the patient reported that for the first time in six years he was

enabled to eat his meals without dread of subsequent distress and eructations of gas. (In the opinion of the writer the fermentation was thus quickly subdued by the active oxidation resulting from the liberation of nascent oxygen.) The treatment was continued in this manner for another month and then gradually abandoned. On September 1st, the patient came to the office, expressed his eternal gratefulness, said that he weighed 185 pounds and believed himself to be completely cured.

SOME NOTES ON URIC ACID AS A CAUSE OF GASTRIC DISORDERS.

BY WILLIAM H. MURRAY, M. D.,
DANBURY, CONN.

IT IS FAST becoming the opinion of careful investigators that the majority of functional disturbances of the stomach, together with certain organic diseases of the same, may be traced directly or indirectly to the uric acid toxin as the principal etiological factor, and that the innumerable cases of indigestion, dyspepsia, biliousness, etc., may very properly, as a rule, be considered local manifestations of a general uricacidemia. Of course, organs which are associated physiologically are apt to become associated in morbid action as well, and thus we see in disorders of the stomach, disturbances likewise of those important organs directly associated with it in the digestive process, and for ostensible reasons the liver is the organ usually primarily affected.

The trite old saying of Feuerbach, the philosopher, that "Man is what he eats," was never truer than it is to-day, and certainly never more significant in its application. We have long had the reputation of being "a nation of dyspeptics," as well as a "gouty people," and we are now just beginning to realize that the fault, in both instances, lies in "error and excess at the table." Had we, as a people, a more thorough knowledge of the chemical composition of food stuffs, and understood better the mode of their introduction into and acceptance or rejection by the animal economy, many egregious errors might be avoided. Few, outside of the medical profession, appreciate the distinction that carbohydrates (starch, sugars and fats) are simply energy producers, while proteids are the actual tissue builders from which is derived tissue waste. We cannot overestimate the importance of an

exact physiological knowledge of the digestion and metabolism of the proteids, inasmuch as from them as a class most of the damaging toxins of food arise—especially uric acid.

As a minute study of the secretions and excretions of the body has received greater attention during the past year than almost any other subject, it will be quite unnecessary here to enter into any explanatory statement regarding the mode of formation of uric acid as a product of faulty nitrogenous metabolism—which is the generally accepted faith; but it may be well to refer to the fact that Dr. Taylor, in his experiments upon himself, has recently demonstrated (Cf. *Jour. Amer. Med. Sciences*, Sept., 1899,) that only about one-third of the uric acid found in the urine is formed in this way. The other two-thirds is clearly the result of a long continued excessive ingesta of albuminous food stuff, and the consequent final inability of the liver and its associate digestive organs to perform thoroughly the act of *luxus* consumption. It should be understood that although nature has provided a way for disposing of the surplus in over-eating, yet, as it is necessarily an exceedingly delicate and highly specialized process, a too frequent occasion for its use is bound to result mischievously. Normally, one-third of the proteids is changed in the stomach by the gastric juice into peptone, which with the remaining portion enters the duodenum and is there further disintegrated by the pancreatic secretion and proteolytic ferments of the bile into hemi-peptones and albumoses, which are readily absorbed by the intestinal villi, and thus taken up into the general circulation. In case of the ingestion of a too heavy meal—as in many so-called "game suppers"—the excess of proteids remaining partially undigested and not needed by the system, instead of passing off as waste with the feces, is mostly changed by the trypsin of the pancreatic juice (assisted by the ferments of the intestinal secretions) into the well known crystalline substances, leucin and tyrosin, which are carried by the portal vein to the liver and there transformed into the soluble urea, which is then excreted as waste matter by the kidneys.

Such is the normal process of *luxus* consumption, but it will be readily seen that, if the over-taxed liver should be too frequently called upon, this work will eventually be less thoroughly performed, and, instead of the end-product urea, the less oxidized uric acid will result. In some

instances, of course, as in atrophy of the liver, the process is even more imperfect than this, and leucin and tyrosin themselves are found in the urine. These various nitrogenous substances, however, differ only in degree of oxidation, all being members of the cyanide of ammonia group; and, with the exception of urea, all are difficult of excretion by the mammalian kidney, which, like the liver, finally becomes injured in these unusual efforts.

The uric acid toxin being thus left to accumulate in the system, certain morbid results invariably follow. Urate salts are formed from the sodium carbonate in the blood, and are sooner or later deposited in those tissues for which there is a predilection, especially the connective tissues—probably because less alkaline than the blood. The slow, but certain atheromate is formed owing to the gradual deposition of uric acid tophi, not only in the fibrous tissue of joints, but in the fibrous tissue of the muscular coat of arteries and capillaries throughout the body, thus destroying their important properties of contractility and expansibility. In this way has the high liver exposed himself, not only to gout and apoplexy, but to the various phases of indigestion and dyspepsia.

Hepatic and renal diseases, especially those interstitial in character, start originally with these same deadly atheromatous changes from the urate deposits, which invariably interfere with the function of the organ affected. Indeed the entire principle of excretion and nutrition, including digestion and absorption, depends for its normal working on the uniformity of arterial tension and free and unobstructed capillary circulation. It is well known that the gastric secretion is normally associated with vascular dilatation, and, that, if the latter be interfered with, the former will be suspended or diminished; but, even as disease of the cerebral arteries is not often surmised until we have apoplexy, so with the gastric arteries; atheromatous degeneration may not be suspected until too late, unless we early recognize in the dyspepsia a history of uric acid poisoning and treat the case accordingly. The entire muscular system of the body, including the fibrous coat of the stomach, sometimes becomes affected, and thus the mechanism of digestion is interfered with through disturbance of its muscular movements, as well as by suspension or perversion of the gastric solvents.

Of all the predisposing causes of dyspepsia, it is generally recognized that deficient gastric secretion with resulting fermentation of food is the most prevalent, and as normal secretion depends upon the most important properties of contractility and expansibility of the gastric blood-vessels, it will at once be seen that the beginning of atheromatous changes caused by the deposition of uric acid salts, is a question of supreme importance in these cases. The glands are of course affected, and when they fail to properly secrete their *pro rata* of digestive fluid to complete the process of gastric digestion, a pathological condition confronts us which cannot be met by makeshifts. The hydrochloric acid and pepsin both being diminished in quantity, much of the proteid food will be left undigested and become to the stomach an irritant foreign body, causing fermentation and ultimately catarrh of the gastric mucous membrane with all its attendant evils. The symptoms which result are legion and certainly very distressing in character, life being rendered so disagreeable that it is essential that the same careful study should be devoted to the etiology of the dyspepsias as to any of the most serious organic diseases.

In regard to the treatment of any case whose history is similar to that we have attempted to outline above, it is evident that advice should first be given on the subject of over-eating, while albuminous foods should be largely interdicted. As this latter procedure will necessarily result in the loss of a certain amount of iron to the system, which is usually taken in with the proteids, it becomes our duty to supply this important element in about the same quantity and in a similar form as that found in the food. For this purpose *small* doses of an organic preparation is indicated; and, furthermore, it should be predigested on account of the delicate condition of the stomach. One of the best preparations known to the writer, answering to this description, is the peptonized albuminate of iron, called feralboid, manufactured in tablet form, one-third grain each, plain or combined with strychnia or other alkaloids. The advantage of such a preparation in these cases, lies in the fact that the iron is readily and *entirely* absorbed. No portion is left behind to blacken the stools and irritate the intestinal mucous membrane, causing constipation with all its attendant evils.

In deciding on the next step in the treatment, it is obvious that lack of

the usual amount of gastric secretion must be met by restoring the physiological conditions upon which the secretion depends. Pepsins cannot do this. They are simply artificial solvents of albuminous foods and can by no means cure the indigestion; *i. e.*, cannot remove the cause and thus restore normal digestive powers. It is clear that before we can restore elasticity to the gastric arteries and obtain normal vascular supply, the deposits of uric acid already formed and being formed must be removed, and the overburdened liver assisted in the performance of its duty in order to prevent the formation of any more. The uric acid solvent is therefore required, as well as an hepatic stimulant. For the former purpose lithia has proven itself the most efficient agent, inasmuch as urate of lithia is formed which is the most soluble of all the uric acid salts, and is consequently the most easily excreted by the kidneys. For the second purpose a laxative saline is indicated, one distinctly cholagogue in effect in order to enhance cellular action, excite the flow of bile and initiate intestinal peristalsis. A therapeutic agent which combines within itself both of these essential qualities must be the remedy *par excellence* in the treatment of these cases. Fortunately we have such a remedy in the laxative salt of lithia, thialion, a drug which has been recently added to our list of standard therapeutic agents, and has already proved itself most efficient in the treatment of the various phases of uricacidæmia.

The following two cases, in which this drug was used with exceptionally gratifying results, were reported to me by a distinguished brother practitioner and are cited here in illustration of the fact that some of the most distressing cases of stomach disorders may be treated successfully by removing the uric acid toxin, at the same time stimulating the action of both liver and bowels.

"Mrs. M., widow, American, mother of four children, height 5 ft. 7 in., weight 190 pounds, consulted me in regard to trouble of the stomach, which she said had existed for nearly two and one-half years, and which had become so alarming and distressing that it had begun to affect her general health. It started, so she said, during a spell of very warm weather, when one extremely hot day, after walking for a considerable distance, she partook of some icecream—after which she cooled off quickly. Subsequent to this, acute gastritis developed with which she was confined

to her bed for two weeks. Since her recovery from this sickness, she has suffered frequent attacks of indigestion, accompanied by the eructations of large quantities of gas. Throughout her life she had been an extremely heavy eater, taking no choice of what she ate; but now she had to be particularly careful in regard to the quality and quantity of her food.

At the time of my first visit to her, she informed me that for an hour after meals, as a rule, gulplings of gas and wind were so great, as not only to cause herself much annoyance, but to annoy everybody else within hearing. But the worst was at night. On retiring, she would go to sleep and after about an hour would awake with a distended stomach—and gulping wind. This would continue for an hour and sometimes longer, until she would become quite exhausted. These gases, as they came up, scorched and burned her throat from their excessive acidity. The bowels were not regular—sometimes being loose and at other times constipated. The tongue had a white coating, and there was a good deal of frontal headache. On certain days, there would be no desire for food whatever. She said that she felt as if the whole digestive tract had been "pickled in vinegar."

In this case it was evident that the gastric solvents were much diminished and that the greater portion of the food, being undigested, remained in the stomach as a foreign body, setting up excessive fermentation with the formation of gases. Desiring first of all to relieve the torpid condition of the liver and move the bowels thoroughly, believing also that there might possibly be an excess of uric acid in the blood, owing to her full habits, I directed her to take a teaspoonful of thialion, dissolved in a cupful of hot water, (drunk as hot as it could be, all taken down at once) three times daily until she had obtained a free movement of the bowels. The first movement occurred after the third dose and a freer one after the fourth dose. To her surprise and delight, after the first dose the eructations of gas became less frequent and at the end of the fifth dose ceased entirely. I then directed her to continue taking a teaspoonful on rising in the morning, three times a week. From this time on improvement was rapid; appetite returned; and, at the end of four weeks, there was no further trouble of any kind. She discontinued the remedy entirely at this date. It is now several months since I treated her and she has remained perfectly

well, showing not the slightest return of the former troubles."

The lesson to be learned from this case, is, that oftentimes an excess of uric acid in the blood plays an important part in the digestive tract as well as in complicating diseases of other organs and there can be no question as to the salutary effect of thialion in this class of cases.

Case No. two was in many respects entirely different from No. one, yet the treatment was the same and the results equally gratifying; to wit:

"Mrs. C., a sallow, anæmic woman, consulted me for extreme debility, belchings of wind and burning in the throat 'when it came up;' together with much distress after eating. The bowels were exceedingly constipated, a movement being procured only about twice a week, and then only by the aid of active cathartics. The appetite was poor, skin sallow and yellow, and conjunctiva injected. Liver marks were on the cheeks. In fact, she showed a marked derangement of the liver, not an organic disease, but simply torpidity, with an excessive fermentation of food in the stomach.

She was directed to take a teaspoonful of thialion, in hot water as given in the above case, and to report on the third day, which she did. The acidity was much relieved; she had had fairly good movements of the bowels; and the general condition seemed much improved. Being anæmic, I ordered her to take a tablet of feralboid, quinia and strychnia as a tonic, before each meal, and to continue taking the dose of thialion every morning as before. She returned the second week after this, when she said she had had several *large* stools, one of which was very black and foul smelling. Her general health was much improved; appetite was better; the pale, anæmic appearance had disappeared; the eyes had brightened, and the change was marked in every way. The dose of thialion was now reduced to three times a week, then to twice a week, and, finally, at the end of five weeks, to once a week.

It is now four months, and she only takes thialion occasionally. I saw her yesterday and found that she was very much improved in every way. The appetite was excellent; no eructations of gas whatsoever; the bowels were normal, a movement being had every day—a large mushy stool; and the patient was full of gratitude."

IMPLANTATION OF A GLASS BALL INTO THE ORBITAL CAVITY.

BY L. WEBSTER FOX, A. M., M. D.,
PHILADELPHIA, PA.

Professor of Ophthalmology in the Medico-Chirurgical College, Philadelphia.

I AGAIN wish to call the attention of the medical profession to implantation of a glass ball in the orbit where the eyeball has been previously removed and where the tissues of the orbit, as well as the lids, have contracted and where it is impossible to wear an artificial eye. Such cases come to the notice of all ophthalmic surgeons sooner or later—either a small shell is worn for a few hours daily or the patient must suffer the annoyance of going without an artificial eye.

It has been four and a half years since I first performed this operation for the relief of a patient who had her eyeball removed when ten years of age. The history of one case is the history of many—I shall repeat the history of my first case and give the description of the operation.

Twelve years prior to this operation I removed the patient's eyeball at the Germantown Hospital, but the tissues had contracted to such an extent that no eye could be worn with comfort. My method is as follows:—An incision is made through the conjunctiva and tissues of the orbit in the horizontal direction, corresponding to scant the diameter of the glass ball to be inserted—for instance, if the glass ball is one centimetre in diameter, the cut would be two millimetres less. The upper lip of the conjunctiva is raised and with sharp-pointed curved scissors the conjunctiva and such connective tissue which lies close to it is dissected off in all directions around the incision, making a pouch into which the glass ball will fit. On account of the vascularity of the parts, considerable bleeding follows this dissection, but it is easily controlled by pressure; after the bleeding stops, the glass ball is inserted into the cul-de-sac with the injector. The edges of the conjunctiva are brought together by five or six stitches and the after dressing is the same as I follow in the evisceration cases.

Immediately after the operation the artificial stump does not show very markedly; but after all swelling disappears we have a beautiful stump

for the adjustment of an artificial eye. It would be almost impossible to note the difference between implantation and evisceration, for the movement is almost the same.

I have repeatedly performed this operation and in every case the appearance of the patient has been improved also obtaining great relief from the retained secretions in the orbital sac, even the contraction of the upper eyelid has been changed. I have not improved my original operation, excepting where the upper eyelids are too short, I perform a Burow's operation, which is that of splitting the cartilage from outer to inner canthus, thus elongating the upper eyelid—this operation does not interfere with the adjustment of an artificial eye afterwards.

I have not been uniformly successful in performing this operation; on account of the cicatricial condition of tissues the stitches would give way and the glass ball would be forced out of the orbital sac. In one individual I performed this operation three times, the first and second were failures, the third time the glass ball was retained and I was enabled to adjust an artificial eye or shell later on. On several occasions I have used silver balls, but, owing to the argyria staining, disfiguring the tissues and coloring it a dark blue, it is rather an objectionable feature and annoying to some; yet one patient, where I performed a Mules, rather liked this condition, claiming that when she took out the shell the orbit more nearly approached the appearance of the natural eye.

This operation must not be confounded with that of Frost-Lang, which is the insertion of a glass ball immediately after enucleation—it is, however, the same principle. I have performed the Frost-Lang's method several times with excellent results. I do not stitch the muscles, as I believe that it is unnecessary—it would have a tendency to keep the glass ball too far down in the orbit.

BURNS AND SCALDS.—

R. *Acidi salicylici*, 3 j.
Ol. olive, 3 viij.

M. Sig. Apply to the burn, covering with lint.—*Bartholow, Med. Rec.*

QUINSY.—

R. Salicylate of soda,
Syr. of acacia, aa 3 ss.
Cinnamon aq., 3 iv.

M. Sig. A dessertspoonful every two or three hours.—*Columbus Medical Journal.*

MEDICAL EXPERT TESTIMONY.

BY GEO. L. PORTER, M. D.,
BRIDGEPORT, CONN.

THE question of the medical expert is a "precious boon" to reformers of at least two professions. Individuals, committees, societies, conventions have discussed, deliberated, resolved; papers, lectures, editorials, denunciatory, humorous, despairing, have been printed; clever lawyers, experienced judges, venerable physicians have investigated, consulted and recommended, yet the old condition confronts us, and all these efforts have resulted in emphasizing the inadvisability of attempting any revolutionary change, lest, like the house-cleaning mentioned in the Scriptures, the latter state of affairs might be worse than the first.

So-called reforms have been suggested, each of some special merit and with occasional endorsement, but each hampered with many imperfections and disapproved by the consensus of medical and legal opinion. The ill-repute of expert testimony is more academic than actual; the personality and evidence of the medical witness have equal weight with those of other experts in different employments, requiring special training.

Opposing testimony, if effective, is naturally undesirable and unsatisfactory to either prosecution or defense and the practice of the courts allows counsel to weaken its influence by fair means if they can, by others, if necessary. Medical men generally are an easy target for the shafts of innuendo and sarcasm. The differences of opinion regarding apparently similar medical and surgical conditions stagger the mind of the inconsiderate with the belief that such differences can not be honestly entertained; they forget that such differences are the basis of all advancement; that counsel are paid and expected to hold different opinions and to controvert the arguments of opposing counsel, that different interpretations of the constitution are the foundation of political parties, that different beliefs regarding transubstantiation and Calvinism divide the Christian world. Early in the century, Dr. Hurlburt when rallied, upon the disagreement of physicians, by a legal friend immediately quoted these lines of Milton:

"Devil with Devil damned
Firm concord holds. Men, only, disagree
Of creatures rational."

The inaptitude of many people, before public assemblies, to concentrate their thought and express intelligently their opinions upon inconsequential and perplexing questions, such as those often proposed by shrewd cross-examiners, obscures the truth and neutralizes the importance of the testimony of some practitioners, entitled by their learning and experience to rank as experts. An undue assertiveness, arising from a natural championship of his opinion; a sensitiveness to slurs—implied or expressed—upon his abilities or experience; an irritability at personalities; an attempt to bandy epithets with the attorney; a heedless or hasty answer, regardless of its importance; a conscientious hesitancy in giving a categorical "yes" or "no" to a question not entitled to such an answer; a statement of professional belief in a dictatorial manner with an inability to support it by authorities, or sufficient proof; these and many other reasons explain why medical testimony is often unsatisfactory and sometimes humiliating. But it might be fairly asked are medical witnesses the only ones who thus offend.

A trial is the application of the law to its alleged infringement. "The Trial by Combat," among people sufficiently devout, was ideal, because it was inexpensive, furnished great entertainment for the spectators, killed and so permanently removed the guilty and "whitewashed" the survivor. In time this was found inconvenient for the less war-like, and unsatisfactory to the sceptic, so by many evolutions in harmony with the progress of civilization our present system of court procedure has been developed. The theory of the court designs the best possible acquaintance with the particular circumstances of each case and the appropriate administration of the law. In cases involving mechanics, navigation, architecture or any other technical questions, individuals, with a reputation for wisdom, in such matters are summoned by counsel to furnish information derived from their knowledge and experience. Where cases involve medical subjects, regarding which, at present, educated and experienced doctors are generally believed to have special knowledge—counsel summon medical witnesses to support their own theories or to controvert those of the opposite side. Of course the medical expert is on the same footing before the court as any other technical expert, his testimony is of the same general character, he is exposed to similar vicissitudes upon the witness stand and is entitled to no particular priv-

ileges. His testimony, however commands more general attention because it generally concerns personal incidents or sensational crimes. Latterly in these relations the medical expert has been much in evidence.

In the experience of the courts it is found that the opinions of medical witnesses differ regarding the importance and significance of symptoms, the extent and continuing effects of injuries, the diagnosis of diseases and mental conditions, and that medical testimony upon one side is neutralized or overthrown by that upon the other side.

To remedy this it is proposed that:

- I. Medical questions should be referred to a single doctor, selected by counsel and approved by the judge. This presupposes a physician of pre-eminent fairness, judgement and ability, and universally recognized as such a person, which is an exceedingly rare combination. This would be so direct, economical and decisive a procedure, and might centralize so much importance upon the testimony of a single individual, that the plan does not commend itself to lawyers except to a limited extent.

- II. The appointment of a medical board to whom such professional matters should be referred, their report to be final.

The selection of its membership would provoke jealousies and arouse antagonisms; its decisions would be questioned; should such a board make a single erroneous or unjust decision, its authority and influence would be thereafter impaired; the legal right of the unsatisfied to prove his claims by other witnesses would be asserted; these and other important objections have been made to this plan.

- III. The establishment of a medical jury before whom all questions of a medical character should be presented. The cumbersomeness and expense of such a method would condemn it, even if it were not for the more serious objections arising from the composition of such a court, and from the absurdity of settling scientific or professional beliefs and truths by a majority vote.

- IV. To have a number of physicians qualify as experts, and the selection of medical witnesses to be restricted to this number. This might secure a higher standard of professional attainments but would probably develop in such gladiatorial professionals more pronounced differences of opinion and a more picturesque exhibition of medical pyrotechnics, than now obtains.

V. To permit the doctor to state his opinion from what he knows of the case, to give the reasons for this opinion, but not to subject him to any cross-examination; the objections to this so-called reform are so obvious and elementary that they need not be mentioned.

VI. To have the rectification of the misdeeds of medical experts accomplished through the discipline of the code of medical ethics. This was recently proposed by a prominent and widely respected judge, in an authoritative address before a state convention. It is the standpoint of the lawyer rather than that of the physician. A code of ethics is a rope of sand for purposes of discipline. Had the judge been as familiar with the disciplinary impotence of our medical code, as are many of the prominent doctors of New York and elsewhere, the suggestion would have added to his reputation of being an upright judge, the fame of possessing a humor as genial as that of Sterne, a sarcasm as drastic as that of Juvenal.

For the present condition of medical expert testimony both doctors and lawyers are responsible; the doctors, because some, who pose as experts, are not prepared by education or experience to properly testify, are not able to restrain the exhibition of partizanship, are not self-disciplined enough to ignore provocation; the lawyers, because in addition to a responsive cross-examination, always disquieting and often harrowing, they frequently resort in the interests of their client to humiliating and offensive insinuations, with the result that some medical men of the highest attainments and authority decline to appear in court as expert witnesses and give counsel the opportunity to place them, in what they consider, a false position.

There is no radical nor immediate remedy.

The courts are the best means thus far attained by the experience of civilized communities for the administration of justice. The lawyers are the professional champions of the legal ring, the witnesses are the figures, lay or otherwise, upon whom they practice their intellectual passes, and blows and rushes—they strike below or above the belt, as they are of low or high degree; in occasional set-tos with the other champion, they command their temper and their smiles broaden as their repartee grows more venomous and exasperating—they are good friends and powerful protectors; in

most of troubles we want the best of them on our side of the ring.

Medical witnesses must take their chance with the others. If they refuse to appear in support of what they do not believe, if when they testify they do so clearly, fairly, sincerely, logically, for their opinions giving reasons easily understood and convincing, enforcing their beliefs by authorities and personal experience, and, upon cross-examination, retain their mental equilibrium, they will be "good witnesses," obtain the confidence of the court and gain credit for the profession. Such men deserve, and generally receive, attention and manly treatment. The expert whose characteristics are the opposite of these, quickly becomes notorious in both professions, and arouses suspicion and prejudice against every theory that he advocates and injures every case for which he appears. Many physicians and most lawyers recognize this tendency towards the improvement of medical testimony, and, while regretting that the differentiation between the desirable and undesirable may not be rapid, realize that when it is secured, the administration of justice will be more intelligently and satisfactorily assisted.

ALOPECIA.

BY L. DUNCAN BULKLEY, A. M., M. D.,
NEW YORK CITY.

Physician to the New York Skin and Cancer Hospital;
Consulting Physician to the New York
Hospital, etc.

PREMATURE baldness is a subject which seems to interest the laity far more than the general profession, and its relief has been largely relegated to the uneducated: it has therefore been the fertile field for the Charlatan. The number and variety of useless or harmful quack preparations, and the ridiculous methods and procedures which have from time to time been vaunted would astonish one, could they be brought together; and yet the ever increasing army of heads more or less bald, both among males and females, shows that the panacea has not yet been discovered; nor is it likely to be, along the lines thus far pursued. A sad, though amusing, illustration of the subject recently occurred to the writer. A patient who had eczema, was a manufacturer of certain advertised preparations, and his "infallible" hair restorer was always seen in barber shops. On one occasion he asked the writer for

Beasley's druggist receipt book, as he explained that his present hair tonic had about run out and he must look up a new formula. One was probably found, for shortly his new preparation "famous" and "warranted" to restore lost hair appeared, and undoubtedly had a large sale, effected by his advertisements and unwarranted claims.

The subject of the causes of premature loss of hair is too great a one to consider fully in this brief article, but attention may be called to some of the salient points bearing on treatment.

All are familiar with the falling of the hair after syphilis and febrile diseases; many have also probably observed that accompanying or following attacks of dyspepsia, where with each recurrence of digestive trouble there will be shortly an increased fall of hair; many have also likewise seen a loss of hair consequent upon great general debility. To the thoughtful mind all these illustrations of the effect of general conditions upon the condition of the hair should be instructive and should help in understanding the pathological relations of the subject of the ordinary loss of hair. As further aid, the nervous relations of the hair should also be borne in mind. Certain forms of alopecia areata are surely neurotic, the bald areas appearing suddenly in response to nerve disturbance; it is also constantly observed that there may be a more or less rapid general fall of the hair after nerve strain, while the sudden turning of the hair white from nerve shock is a well attested fact; finally the blanching of the hair along special nerve tracts involved in neuralgia is also well known.

It is therefore abundantly shown that the vitality and nutrition of the hair depends ultimately upon physical conditions of the system; which is, of course, only what every physician tacitly acknowledges in theory, but does not often enough put in practice.

But, it may be asked, are there not local causes also for loss of hair? Most assuredly there are, but in the ordinary run of cases of baldness, they play a very insignificant part. The loss of hair occasioned by the vegetable parasitic diseases may be at once excluded, as also the rare instances of trouble resulting from erythematous lupus, and also such ulcerative diseases as destroy the hair follicles in localized patches.

A considerable claim has been made for seborrhoeic eczema, as a fertile source of baldness and, un-

doubtedly this is operative in a certain proportion of cases; but its importance as a cause in the ordinary run of cases has been greatly overestimated by some. It is manifestly unfair, just because a certain amount of scaling or dandruff is found to class the case as one of seborrhoeic eczema, and to regard this as a cause of the loss of hair—it is a confusing of cause and effect. While a parasite has been claimed to have been found in seborrhoeic eczema, it is by no means proven that this is the pathogenetic cause, either of the scaling, or of the accompanying or succeeding baldness. Undoubtedly well marked seborrhoeic eczema on the scalp is constantly seen to be associated with baldness, but on the contrary multitudes of cases of steady or rapid loss of hair are found where there is or has been little or no dandruff, and certainly no well marked development of the disease. In many instances where there is more or less scaly condition this is to be looked upon rather as a result of the conditions which have induced the baldness, namely the poor nutrition of the tissues of the scalp; and the exfoliation of the external coat of the skin is only another manifestation of the shedding process of the hairs, which rest in a follicle lined by this same epithelial structure.

For, in order to understand the growth and fall of the hair, it is necessary to bear in mind the anatomical relations of this portion of the body.

The hairs begin to be developed during the third month of foetal life, by the formation of a little epithelial prolongation into the corium, which later develops into the hair follicle; the papilla at the bottom forms later. It is to be remembered that the hair follicle represents a pouch in the true skin, which is lined by the epithelial layers, as though a blunt instrument had pushed them before it, into a soft substance beneath. The earlier hairs are formed from this epithelial plug, and are known as bed hairs, which are shed at or soon after birth, a new hair growing from the papilla and lower portions of the follicle.

4 EAST 37TH STREET.

(To be Continued.)

—:O:—

ACUTE PHARYNGITIS.—

R Codeine, gr. 5.

Ext. catechu, gr. 30.

Ext. glycyrrhiza, gr. 150.

Divide into thirty troches. One every two hours.—*Merck's Arch.*

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John J. Berry, M. D.,
Assistant Editor.

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Editorials.

MEDICAL PRACTICE LAWS.

WHILE the spirit is moving upon the face of the waters and efforts are being made to protect the regular practitioner, a reference to at least some of the shortcomings of the medical bills may be fitting and timely.

No one fully realizes the strength of the opposition and the amount of money and influence which is pledged to uphold the cause of quackery, until he attempts to introduce into the legislature a bill for the limitation or suppression of this evil. If it happens to be of a strictly prohibitory character, it of course fails to pass. The state archives are full of these productions of honest but awfully unsophisticated legislators.

Still we do have medical practice laws, such as they are, and for even these we are more or less thankful. Yet as we look them over we realize that they exist only with the gracious permission of some of those whom they seek to exclude—such permission being obtained by truly political methods and by the giving away of many of our just rights and privileges.

For example, quacks practicing in a state prior to the passage of such laws are exempt and may receive licenses with the rest upon due application. We note also that hotel proprietors and others may import any species of doctor to take charge of their special work. Provisions such as these, which, for instance, New Hampshire is the proud possessor of, are not only an injury to the profession, but an endorsement of disreputable men, inasmuch as it

legalizes their practice and, in the eyes of the world, places them in the same category with honest practitioners. The Maine code, on the other hand, lets in anyone who is willing to forego the title of "Dr.," whether he be black, white or speckled, while some of its other provisions are equally absurd.

So, in most of the state codes, one may find similar provisions, evidently not in the original drafts, but without doubt incorporated therein as an afterthought—under the stress of strong "moral suasion." However they form interesting reading, and go to show that in the conflict with the malignant forces prevailing, the children of light are not in it, and that in the chief transformation scenes the phenomenon of the "itching palm" plays quite an important rôle.

THE BOSTON EMERGENCY HOSPITAL.

CONSIDERABLE note and comment has recently been accorded this institution, which for some time past has led a precarious existence, and which, at the present writing, remains closed from lack of funds.

We know little of the internal administration of this hospital, but it may be stated that it has not received general endorsement and commendation at the hands of the profession, and this is possibly one of the chief factors contributing to its downfall. We understand that a movement is on foot to pay off the indebtedness and arrange for, or rather guarantee, its future existence.

This plan is no other than the collection of an annual assessment from the members of various labor unions by which each one, on payment of a dollar or so per year is entitled to unlimited gratuitous treatment. If this be the case, some light is thereby shed upon the past history of that institution, and the profession will see in the fact a confirmation of previous suspicions. Any enterprise which countenances such commercial methods of acquiring medical and surgical material should be severely handled by regular physicians and condemned in unmeas-

ured terms by the local associations. There are already enough schemes afloat having in view the evasion of rightful bills and the defrauding of the private practitioner, but such a method as this is peculiarly aggravating by reason of its claims and the publicity accorded it. We trust that prevailing rumors in support of these facts are incorrect and that no such infliction will be placed upon the profession of Boston, which has done nothing to deserve such as this.

URIC ACID.

AUTOINFECTION from the various toxins manufactured and retained within the human organism has in recent years become to scientific investigators a study of the most absorbing interest, and has already resulted in many important discoveries relative to diseases, the nature and causation of which had hitherto remained enshrouded in impenetrable mystery. Physiological chemistry has demonstrated that among these pestiferous products uric acid is doubtless the most prolific of evil consequences; and, under the general head of uricacidæmia, are now classified as local manifestations many diseases which were always considered separate and distinct, each designated under its own specific name.

There is already a plethora of literature on this subject and many ingenious theories advanced to explain in detail the manner in which this toxin is formed and retained in the circulation. It is commonly admitted, however, that its presence may be brought about in two different general ways—from nitrogenous metabolism, or from excessive ingesta of proteid food stuff—in both of which cases it is a *sine qua non* that the liver should be overtaxed and unable to perform thoroughly a certain specialized process—that of changing the ammonium carbamates into urea.

It should be understood that uric acid is the end product of tissue metabolism in birds, reptiles and fishes, and is excreted as such with all other waste material from the anus in the form of solid urates. As we proceed one step higher in the animal scale,

to the mammals, we find instead of uric acid, the more highly oxidized urea as the ultimate product of tissue metamorphosis. This difference can be explained only on teleological grounds; *i. e.*, that in the process of evolution, in addition to the ordinary intestinal outlet for solid waste matter, a set of emunctories has been evolved, the genito-urinary organs, for the purpose of providing a special outlet for waste tissue products in solution—thus the soluble urea.

It is now well established that this latter substance is finally formed in the liver, to be excreted by the kidneys; but in case of long-continued over-eating, when albuminoid matters are ingested in excess of the power of the liver to convert them—*i. e.*, to convert the products of pancreatic digestion, leucin, tyrosin, etc., into urea—uric acid results, which, being difficult of excretion by the kidneys, is finally accumulated in the blood in excess. It has lately been determined, too, (*Cf. Jour. of Med. and Science*, Oct., 1899,) that “ammonium carbamate is formed to a greater or less extent in all the tissues and organs of the body while in a state of activity; that so long as the liver is capable of performing its function the carbamates are converted into urea and excreted as such in the urine, but that if from any cause, (as that above mentioned) the function of the liver becomes disturbed, the carbamate of ammonium accumulates in the body and causes auto-intoxication.” Furthermore, it is thought by some that leucomains, the waste products resulting from the disintegration of the nuclei of the worn out tissue cells, are, under certain disturbed conditions of the liver, converted by that organ into the less oxidized alloxans, or alloxanic bases, instead of into normal urea. These so-called alloxans—xanthin, hypoxanthin, paraxanthin, guanin, adenin, sarkin, creatinin, creatin, etc.—are closely allied to uric acid, and classified by chemists as “the uric acid group.”

It is now recognized that excessive alimentation is one of the growing evils of advanced civilization, and that the people who suffer from uric acid poisoning are usually those who indulge in the pleasures of the table

and habitually consume much meat, pastry, and highly seasoned and rich food of all kinds. The idle, luxurious and indolent, men of sedentary habits, men who have led active lives, but on retiring from business have continued to indulge in a full diet, are the inevitable victims of the protean mass of symptoms grouped under the name "uric acid diathesis."

In regard to the pathological effects of this autoinfection, we know that at first, while the toxin is still confined to the circulation, we have various functional disturbances, or "masked symptoms," such as headache, vertigo, sleeplessness, nervousness, etc., but that sooner or later the urates are deposited as tophi in those tissues of the body for which there is a predilection—especially the connective tissues, probably because slightly less alkaline than the blood. We are indebted to Minkowski for the knowledge that when adenin (one of the "uric acid group") is injected into the veins of a dog, it causes vomiting, malaise, and after a few days death. The autopsies showed intense inflammation of the stomach and intestines, and evidence of acute nephritis; deposited throughout the renal tubules were peculiar spherical bodies of a crystalline appearance, *and the interstitial tissue was greatly increased*. These spheruliths were found on examination to be made up largely of uric acid."

It is this property of causing proliferation of connective tissue cells and arterial tension, that renders autointoxication from uric acid so dangerous. Thus in Bright's disease we find the interstitial tissue of the kidney infiltrated with urate deposits, and an abnormal growth instituted which interferes seriously with the function of the organ affected—certain hepatic disorders, too, are brought about in precisely the same manner. In apoplexy we have the minute tophi deposited in the intima, or fibrous coat of the arteries, causing atheromatous degeneration. We find the same thing in the capillaries and blood-vessels elsewhere in the body, especially in the stomach, thus preventing and diminishing the gastric secretion and causing the various phases of indigestion and dys-

pepsia, with all their attendant evils. Gout has long been recognized as due to urate deposits in the fibrous tissues of the joints—frequently setting up inflammation as in articular rheumatism, or if deposited in the muscles, causing muscular rheumatism. Irritation of the vagus by the points of the biurate crystals is now considered a frequent cause of asthma, while various neuralgias and manifestations of neurasthenia are due to irritation of other nerves throughout the body.

Even epileptiform seizures are believed by many to occur at the time of a uric acid storm. Various affections of the genito-urinary system, as cystitis, gravel, calculi and prostatitis are also easily traced to this same causative factor, while Dr. J. Lindsay Porteous is of the opinion that nocturnal urination of children, especially if they have had their fill of sweetmeats, is frequently due to the presence of this same toxin. As to our own opinion on this entire subject, though we may not go so far as the celebrated Haig, of London, in attributing nearly every disease which flesh is heir to, to this one source of infection—we do believe that very much well-defined, as well as ill-defined, invalidism is due to the retention of this waste organic material in the organism, and that it behooves us, as scientific physicians, to give the subject honest and careful consideration.

THE BURIED ANIMAL SUTURE

THE RECENT discussion upon the better methods for the cure of hernia at the Columbus meeting of the American Medical Association, developed a variety of opinions from a considerable number of our best surgeons, representing all parts of the country, upon the advantages to be derived from the use of the buried animal suture in wounds in general, as well as in hernia. The earlier criticism that suppuration followed their use and was attributed to the defective character of the suture material was acknowledged by a number of operators. These men naturally preferred silk, usually introducing as a through and through suture, so that it might be easily re-

moved. A very considerable number of the more noted operators stated that by their improved technic the use of rubber gloves, etc., suppurating wounds were so minimized as to be almost excluded from their practice. These men placed more and more importance upon the advantages to be derived from suturing wounds in layers without drainage, using some kind of aseptic, impermeable dressing.

Many of our leading surgical authorities now consider the treatment of all aseptic wounds incomplete, unless the sundered tissues are closed in layers, like structures joined to like, by buried animal sutures, and the wound sealed without drainage before the patient leaves the surgery; and this as the highest fruitage of modern aseptic surgery.

The aseptic closure of well vitalized tissues, held in even coaptation without undue constriction, by aseptic animal sutures, aseptically applied and sealed without drainage will be followed by primary union. This may now be accepted as an axiomatic law in surgery. The choice of suture material is important. It should not be so large as to overtax the reparative processes. It must not be treated in a way to prevent its ultimate absorption. It must be prepared so that this process shall not ensue in too short a period. Catgut can be prepared in a variety of ways to make a satisfactory suture. Tendon for many reasons is preferable, and many surgeons of both continents have adopted the fine, well-selected tendons from the tail of the kangaroo as preferable to that of any other. Unfortunately, many surgeons and most dealers are ignorant as to its quality. At the best it is expensive, and the dealers are far less careful in its selection than formerly. The quality of tendon varies as greatly as the quality of leather. The fine whole tendons from the tail of the smaller varieties of kangaroo are greatly to be preferred. Properly preserved from freshly killed animals they are easily sterilized and when carefully prepared are entirely trustworthy. It now appears safe to predict that the time is not far distant, when many of the clumsy and cumbersome details of wound treat-

ment, which still prevail, will be relegated to the past, that the safety of the patient will be less and less endangered during the post-operative period and that good surgery will not be considered well done, when the special attention of the dresser and nurse is required to supplement that of the operator.

—:o:—

After Office Hours.

VIII.

IF THERE was anything that Budweiser liked better than Rudesheimer it was books. According to his opinion, mankind was composed of two classes—those who read and those who didn't. Those who lived a purely intellectual life and those who were so much occupied in making a living that they read nothing but the market quotations. The latter were really too contemptible and too low in the intellectual scale to deserve any consideration whatever.

And he didn't care much about prescribing for them either, but if accidentally forced to do so, these patients always went away with the impression that the doctor didn't care whether the medicine relieved them or not, and perhaps even hoped that it wouldn't. But as to the minority—*they* enjoyed the prerogative of kings and could do no wrong. And when I sometimes spoke of some one of a past generation who was a sad reprobate, the doctor would say: "Well, I don't know about that, but he was a great student. Why, he owned that first edition of Sterne I was telling you about the other day!" That, of course, settled it.

Our philosopher really couldn't afford to indulge in such expensive fads as these, for his income barely sufficed for daily needs, but, as I say with him, books came before bread and more than once have I known him to spend his last cent for some dilapidated literary relic—to the unutterable disgust of the strictly practical Mathilde, who denounced all such purchases, as "Dummes Zeug," and this with an accompanying pantomime worth going far to see.

So when the doctor made a capture of this kind, it meant no

more medical visits *that* day. He simply shut the door and was alone with his treasure, and if anyone ever succeeded in getting in, he forthwith and precipitantly got out again, to be taken in hand by the guardian angel, who explained that the, Herr Doktor, was very much upset by news from Shermanny, but that he would come to see the sick lady "r-r-right away"—and he had to go.

Now it came to pass that he started down the Avenue that morning to pay a bill, but, unfortunately, was inveigled into a second-hand book store, where he found, accidentally, one of the "Feur Books" of Confucius, which, of course, he had to have. So, instead of completing the errand, he turned his face homeward, while the aforesaid account kept right on running in its usual way.

"I suppose every age and every nation has had its own peculiar superstitions," said the doctor, settling the large pipe-stem firmly between the first two bicuspidæ, and noting that a source of inspiration was within easy reach. "Even away off behind the great wall of China, we find Confucius lamenting these frailties of mankind. I saw something here just a few moments ago on this very thing"—and reverently turning over the leaves of the "Third Book," he read the 113th maxim: "The wise physician giveth medicine to those of weak understanding, but the minds of the thoughtful incline rather to words of counsel." "And here's another: 'He who deals in mysteries for the edification of the vulgar acts with wisdom, but he who swears by his ancestors plays the part of a fool.'"

"Now, you would naturally think that the laws of survival and natural selection would kill off these fools after awhile, wouldn't you? But there seems to exist a hitch somewhere, for here is this old chronic philosopher speaking to us out of the darkness of the East, and lamenting that out his way the idiots are existing in undue proportion and are taking up most of the sidewalk. But I think it is just as well we do not have to deal with cold, clammy facts all the time, but with our patients to help us, we can take a little mental outing once

in awhile. Sickness, therefore, isn't such an unpleasant affair—for us, for the doctor who is not a hopeless cynic can often get in this way an intellectual *pour boire*, even if the more material recompense is not forthcoming. I am amazed sometimes at the endless assortment of superstitions and perverted notions and dislocated ideas which poor, worthless humanity acquires and treasures up for its own satisfaction and our edification. Station and environment have a modifying influence, of course, but wherever we go some phases of these old mediæval vagaries will bob up at unexpected times and threaten to disturb our mental equilibrium.

I suppose that mysterious process known as 'teething' is a greater source of comfort to the maternal economy than any other affair of social life. Not only is the first incisor a wonderful work of nature in itself, but is a most reliable index of the baby's mental capacity, which he deliberately shows to the world at large that it may know what to expect in the fullness of time. When two appear at once—well, then the parents feel justified in calling in the neighbors; and old Mrs. Billings, herself the mother of eight children, produces the rough and time-worn thimble, and while industriously rubbing the tender little gums, sadly remarks that such a precocious child will certainly 'never live to grow up.' But with complete disregard of all established rules, if continues well and happy as circumstances will permit; until one day in August it goes to spend the day with its grandmother, who has been heard to remark that 'children ain't brought up now as they was in *my* day,' and that her babies always sat at the table and ate what the rest did. So she brings out the family Bible and, with a total disregard of its unprotected binding, places baby thereon and proceeds to introduce him to currant jelly and a few slices of cucumber, which she raised fresh in her own garden, and hence 'wouldn't hurt nobody.'

It was singular that the little one should be taken sick that very evening, tho' little attention would have been given the matter, had not the mother reflected that it was Friday,

and that one of the neighbor's children, who was very sick, had been seized at the very same hour of the day. So she considerably waits until the doctor has retired, and then sends in a hurry call, requesting that he get there just as soon as possible.

But as the medical adviser knows the family, he doesn't exactly fly, but he does arrive after awhile, and with his castor oil and bismuth proceeds to cross swords with the approaching enteritis. The mother, however, immediately discovers an unpardonable incompleteness in the doctor's interrogatories and reproachfully calls his attention to the alarming fact that baby is cutting his 'stomach teeth,' and insists upon showing him one that is 'most through.' Now, this was a most grave oversight on the doctor's part, and he can make up his mind never again to enjoy the full confidence and respect of that mother. So thus it goes, and we are forced to the conclusion that a knowledge of local folklore is almost as valuable as medical skill."

"But what becomes of that baby in the meanwhile?" I asked.

"Oh, if he is foreordained to grow up, hygiene and a few simple remedies will be sufficient, but once let him escape from the guiding hand of Providence and get into those of the neighbors, or into the weirs of the specialist, and I wouldn't give much for him at the end of the season. Let them wash out his little stomach and give high enemata and static electricity, and perhaps a course of mercury simply because its maiden aunt once had a sore on her lip which she was not willing to account for, and if that baby don't die, just out of consideration for its father's bank account, I shall be very much mistaken. I really don't know where the refinements of these latter days will lead us anyway. Why, this pædiatric cuss down below here, said the other day that every breast baby with strabismus should wear glasses."

"Does he advise an extra pair to wear while nursing?" I inquired.

"Shouldn't be surprised," said the doctor. "He's just such a d——."

"But, you were speaking of superstition," I suggested.

"Oh, yes! Well as I was saying there are people of ill-defined religious scruples and some self respect, who will deny ever having held a political office, but no one, however reticent, ever has diphtheria or the grippe three times and fails to tell of it—unless he happens to want some life insurance. He takes a certain amount of pride in the fact that he was very, very ill, and he dearly loves to compare notes with his neighbor across the street who was once so sick that he had three doctors—in succession, and whose life was finally saved by his wife's sister, who happened in, purely by accident and who drew out the inflammation by a series of onion poultices applied to his stomach at half hour intervals.

And haven't you heard Mrs. Perkins tell of the sad case of old Mrs. Peterson, who was so tied up with pain that she finally reached that useless as well as embarrassing condition in which 'she couldn't neither set or lay,' and how she was promptly relieved by a more or less general application of 'mustard drafts'?"

"But you were referring now to the ignorant classes," I said.

"No, I'm not either. This queer condition of mind isn't confined to the '*oi polloi*.' The educated are afflicted likewise. Why does the lawyer who believes that everybody else is a liar and who habitually sifts and classifies heaps of evidence bearing upon a claim or a title, run off and buy Esau's Kidney Cure, simply because the advertisement says it is a good thing? Why does the solid man of a community pass by his family physician and call upon a notorious quack, or go and buy a bottle of Sampson's Nerve Tonic, just because it has been marked down to 98 cents? I don't think you can even tell me why the best read people of your town believe that a fracture can be cured by prayer or mental concentration. I could go on *ad infinitum* with these examples, but the subject is a painful one, and as I think of it, I feel more and more ashamed of my fellowmen and disgusted over the relationship. With people of this ilk, almost any method seems justifiable—what was it Confucius said about them? Oh, yes!—maxim 416: 'Speak not the truth to

the credulous, lest being a wise man, he esteem you a babbler, or lest, being a fool, he claim you for an equal.'"

"But, speaking of brains," I said, "don't you think the type has changed during the past few centuries?"

"Most certainly," said he. "Why shouldn't the present condition of civilization modify the type mentally as well as physically? And is not the admittedly typical, high strung, over-stimulated make-up of to-day, more susceptible to certain influences than ever before? We all know it is, but we won't prove it, for the facts might not look well in print. Now, it is a scientific principle that the more complex a mechanism the more subject it is to disarrangement. The 19th century mental adjustment is particularly delicate, and peculiarly sensitive to physical disturbances. The early pilgrim had about the same nervous make-up as the New England clam—and he behaved in very much the same way. But we have since become more complex, and so the theologian has been obliged to modify his creed to meet the requirements, and the doctor has had to discover some artistic preparations of mercury suited to the high and cultured classes, and likewise double up on his nervines and sedatives."

"But you do not mean to say that immorality is being encouraged?" I asked.

"Well, it looks very much like it. This is an age of refinements, both in morals and medicine—new delinquencies are being discovered every day and criminal offences are being committed in a more polite and artistic way than ever before. Now, when the sinner gets sick, everything possible is done for his comfort and diversion. He has silvered pills and tempting capsules. He has special wines and delicatessen, and even Sanitaria and Hot Springs, and easy-going specialists. *Facilis descensus averni*. And the luxuries of present transportation will make his trip to perdition an entertaining and delightful one.

And as for the saints—alas, there are few of us now left, and as we stand shivering outside in the cold, bleak night and, flattening our noses against the window pane, look in upon the fes-

tivities and all the good things which the world provides for the high-steppers, there comes to us the solemn and impressive thought that *we* have done nothing to entitle *us* to any of this, and that, our set, has not yet commenced to inherit the earth."

—:o:—

Book Notices.

A LABORATORY MANUAL OF PHYSIOLOGICAL CHEMISTRY. By Elbert W. Rockwood, B. S., M. D., Professor of Chemistry and Toxicology in the University of Iowa. Illustrated with One Colored Plate and Three Plates of Microscopic Preparations. 5 $\frac{3}{8}$ x 7 $\frac{3}{4}$ inches. Pages viii-204. Extra Cloth, \$1.00 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

This admirable little work has been prepared with the aim of imparting accurate knowledge through the student's own observation, the author believing that it is only by practical work that the student can become familiar with the physiological changes in progress in the animal body and their products. It is becoming the general opinion that the laboratory method of instruction is far superior to the didactic, and this book cannot but prove a real help to the student in such investigations.

THE ABDOMINAL BRAIN AND AUTOMATIC VISCERAL GANGLIA. By Byron Robinson, B. S., M. D., Author of "Practical Intestinal Surgery," "Landmarks in Gynecology," etc., Professor in Chicago Post-Graduate School of Gynecology and Abdominal Surgery. Price \$3.00. In Clubs of 12, to Students, a Discount of 20 per cent. is Offered. Published by the Clinic Publishing Co., Chicago, Illinois.

This volume is unique in covering a special field but little touched in other literature, containing views concerning the anatomy, physiology and pathology of the abdominal brain. By the "abdominal brain" is meant the solar plexus of older authors. In the present work the author has attempted to show the extensive utility and dominating influence of the abdominal sympathetic nerves upon the animal economy. The argument is partly based upon the so-called reflexes, as they are observed both in health and disease. The author does not claim that deep-seated, grave diseases are caused by reflex irritation, nor that these dis-

eases are done away with by removal of the reflex or peripheral irritation, but he does state that the chief suffering is not due to deep-seated disease, but rather to superficial, reflex irritation, which brings in its train innumerable disturbances capable of unbalancing the complex abdominal visceral system. The author is aware that the present volume does not belong to the stereotyped, systematized text-books; yet he is confident that the thinking reader will find in its pages ample reward for its perusal.

INTERNATIONAL CLINICS. A QUARTERLY of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical College of the United States, Germany, Austria, France, Great Britain, and Canada. Edited by Judson Daland, M. D., Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania. Vol. III, Ninth Series. Published by J. B. Lippincott Company, Philadelphia, Pa.

This is a volume of good size, containing 300 pages, and is filled with matter of the greatest practical importance to the general practitioner. It is illustrated with photographic plates of certain skin diseases and contains a few figures and diagrams. The chapter on "Treatment" is especially good, comprising about one-third of the work.

YELLOW FEVER: ITS NATURE, DIAGNOSIS, Treatment and Prophylaxis, and Quarantine Regulations Relating Thereto. By Officers of the U. S. Marine Service. Together with an Abstract of the Report of the Medical Officers, Detailed as a Commission to Investigate the Cause of Yellow Fever. Prepared under Direction of the Supervising Surgeon-General. Published by the Government Printing Office, Washington, D. C.

This is a paper-covered volume of about 160 pages, comprising a very comprehensive review of the subject of yellow fever, and should be in the hands of every practicing physician. The treasury department has also issued a separate volume, containing the report of the commission of medical officers, detailed by authority of the president to investigate the cause of yellow fever. This report covers 96 pages.

Current Literature.

"Neurasthenia," by John Punton, M. D. Read before the Kansas Medical Society, Topeka, Kansas, May 5, 1899.

"Shipment of Merchandise from a Town Infected With Yellow Fever," by Surgeon H. R. Carter, U. S. M. H. S.

"Constipation—Its Treatment by the Mechanical Measures," by H. Iloway, M. D. Reprinted from the *Medical Record*.

"Acute Gastro-Intestinal Affections in Children," by George M. Wells, M. D. Reprinted from the *Medical Sentinel*.

"The Failure of Antitoxin in the Treatment of Diphtheria," by J. Edward Herman, M. D. Reprinted from the *Medical Record*.

"Train Inspection in Yellow Fever Epidemics," by Surgeon H. R. Carter, M. H. S. Reprinted from Annual Report Marine-Hospital Service, 1898.

"Mortality Statistics in the United States for the Year Ending December 31, 1897." Reprinted from Annual Report Marine-Hospital Service, 1898.

The Rev. William Barry's paper "The Keepers of Literature" in *The Living Age* for Nov. 4, is a defence of that much-abused class, the literary critics.

"Contribution to Our Knowledge of Tuberculosis Antitoxin," by C. Fisch, Ph. D., M. D. Reprinted from *The Journal of the American Medical Association*.

A FAMOUS WOMAN'S NEW POSITION. Mrs. Margaret E. Sangster, who for over ten years has been the editor of *Harper's Bazar*, has resigned that position and joined the editorial corps of the *Ladies' Home Journal*, in which magazine she will hereafter conduct a prominent department.

The Living Age, which recently reprinted from the *Nineteenth Century* a caustic criticism of the Women's Congress, written by a woman, presents the other side in its issue for Nov. 4, in an article written for the *Nineteenth Century* by Fannie H. Gaffney, president of the American Woman's Council.



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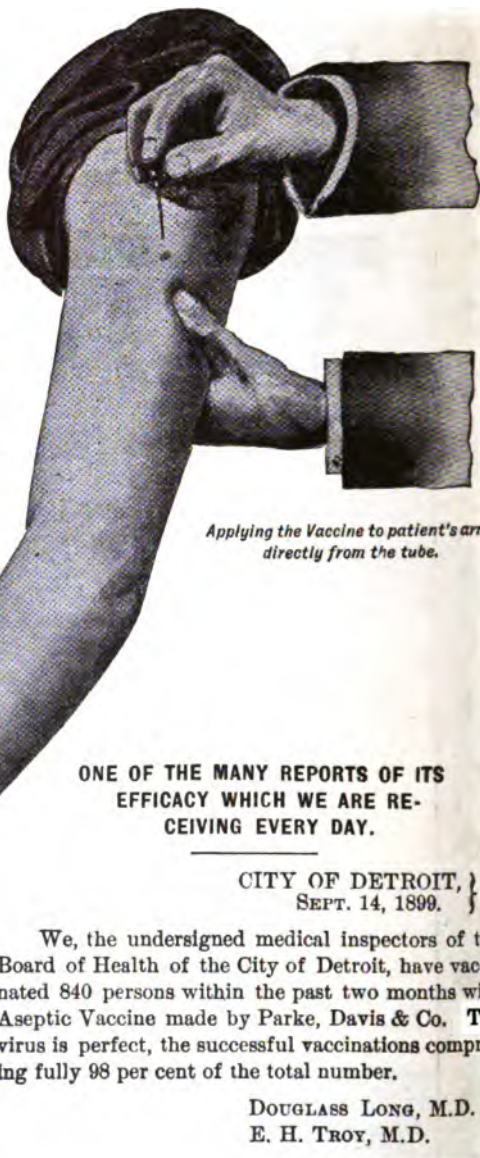
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SEIDLITZ POWDERS: A NEW DEPARTURE.

Editor New England Medical Monthly:

If those that use the powders will, after mixing wait until effervescence has nearly ceased, they will find a more pleasant beverage, more easily taken, devoid of gas, which in many cases produces more harm than good, for there is already too much gas in the stomach. If taken as above stated, they are just as effectual and more easily taken by delicate people. It is an erroneous and foolish habit one that has been impressed upon people for years, that they must be drunk while effervescing. Any one that will try them as I have stated will agree with me. This statement is made after many years of study and practice.

S. E. Morgan, M. D.,
Sunfield, Mich.

SOME PRACTICAL RESULTS.

Editor New England Medical Monthly:

Experience is not only a great and exacting teacher, but also a trustworthy and, when properly approached, efficient and reliable demonstrator. In these days of careful and painstaking investigation, it is not often necessary to rush blindly into the wilderness of speculation in search of the truth until it shall be revealed by costly experience, when the broad sunlight of history illumines the path and practical results already obtained, stand as fingerboards directing to positive results. Thus, in Medical Science, we are not often obliged to rely implicitly upon personal experience with remedies of reputed merit in order to teach us their value, but, having knowledge or evidence of this on general principles, we find the actual demonstration by practical application.

Upon first perusal of the formulas of antikamnia laxative tablets and antikamnia and quinine laxative tablets, it seemed evident to the writer that these combinations were good on general principles and hence their subsequent use can scarcely be called "experimental"—though at the same time, since the positive results obtained by the use of these combinations fully reached, and in some cases exceeded expectations, it seems fitting that the results obtained in a few of the earlier cases in the treat-

ment of which they were employed, should be placed on record.

CASE I.—The first case in which either of the forementioned combinations was employed was a case of severe "cold." Mr. J. A. had been fighting a very troublesome "cold" for over a week, but without making the slightest headway against it. Examination showed general inflammation of the mucous membrane of the air passages, from the superior meatus of the nose to and throughout the larger bronchi. There was headache, deafness, ringing in the ears, soreness of throat, a bad cough, and that general dejection consequent upon such difficulty. It was evening when patient was seen and he was given a hot foot bath and two antikamnia and quinine laxative tablets and sent to bed. Six more of these tablets were left and two ordered given every six hours, a soothing cough mixture was also prescribed. When, a couple of days later, the patient was seen on the street smiling and evidently feeling quite well, he said: "Say, Doctor, I'm coming over to get some more of those 'alphabet lozenges' some time—we'll need them in the house to break up colds this winter. They're all right."

CASE II.—At the time these laxative combinations of antikamnia were secured, the writer had under treatment a stubborn case of bilious remittent fever, which was progressing very slowly under quinine and saline laxatives. There was persistent fever—with resulting debility—rising slightly as the day advanced and remitting after midnight; the bowels were decidedly constipated and the dejections were hard and dry—except when modified by magnesia or salines. This condition of affairs had continued nearly two weeks, when patient was put on antikamnia and quinine laxative tablets, one every four hours. These, with regulation of diet and an occasional bracer of good Bourbon in the early morning when pulse became weak, were all that was required to render patient convalescent in five days. In bilious fevers and sthenic conditions—accompanied by constipation and torpid excretory function—these tablets are almost specific.

A great many people, both men and women, suffer with recurrent bilious headaches, and there are few physicians in general practice who have not one or more of these patients among their patrons. At a glance the antikamnia laxative tablets recommend themselves for this condition, and two cases in which

they have been employed by the writer give the "evidence of demonstration" mentioned at the beginning of this report.

CASE III.—Mrs. A. L., subject for years to recurrent bilious headaches, had tried by various approved means to avoid their recurrence—had visited the oculist and the nose specialist, had lived on limited diet and taken prescribed daily exercise—but still they continued to recur in from five days to two weeks. The attacks were very severe. Sometimes there was vomiting, though not always, but the dizziness when the head was raised and the intense pain in both frontal and temporal regions regardless of position were torturing. Fortunately, the patient can tell by uncertain feelings in the head—and sometimes in the stomach as well—when these attacks are coming on, and as they frequently begin at night or in the early morning, the premonitory signs are usually present the evening preceding an attack. It is needless to mention the various remedies and means employed to abort these attacks, but suffice it to say that none have succeeded so well as antikamnia laxative tablets. Two tablets are taken by patient as soon as there is evidence of an attack coming on, and one (or two) more taken the following morning, if the first are taken at night, or in from three to four hours, if otherwise. So far this treatment has invariably prevented a regular attack, and we believe that they will ultimately remove the tendency to the complaint as well.

CASE IV.—Mr. M. L., occupation, traveling salesman; recently recovered from a severe quinsy sore throat. Following this attack was a bilious tendency, manifested by morning nausea, constipation, and severe headaches in frontal region and top of head, and recurring in greater or less degree almost every day. Usual remedies were employed and for a time a Seidlitz powder before breakfast each morning bid fair to put the difficulty to rout, but at length even this measure failed. At this time antikamnia laxative tablets came the writer's way and were at once given the patient—with instructions to take one before each meal and at bedtime for a day or two and gradually reduce the dose to one tablet night and morning. This was done and the headaches, nausea, etc., disappeared, to use the patient's words, "as by magic."

J. Hobart Egbert, A. M., M. D., Ph. D.
Holyoke, Mass.

Abstracts.

BETA-EUCAIN AS AN ANESTHETIC IN EYE, NOSE AND THROAT WORK.—Dr. William H. Poole, Detroit, Mich., read this paper, in which, after reporting a series of cases in which this agent was used, he drew the following conclusions:

1. Eucain is decidedly less toxic than cocain, therefore superior to it.
2. Its aqueous solutions keep well, and can be sterilized by boiling without destroying the activity of the drug.
3. It produces anæsthesia equally well and sometimes better than cocain.
4. It is superior to cocain, in that it causes no heart depression or other unpleasant systemic effect.
5. It causes no mydriasis, and no disturbance of accommodation, which is an advantage in some cases.
6. It is less dangerous to the cornea than cocain, inasmuch as it does not cause a desquamation of the superficial epithelium. — *Abstract of Proceedings Mississippi Valley Medical Association, Surgical Section.*

THE ANTISEPTIC AND ELIMINATIVE TREATMENT OF TYPHOID FEVER.—Dr. T. V. Hubbard, in a paper presented at the last meeting of the Georgia Medical Association, says:

"The treatment I have used, as suggested to me by Dr. Stockard, of Atlanta, consists in the administration of calomel, one-half grain, guaiacal carbonate two grains, podophyllin one-twentieth of a grain, given in capsule every two hours for twenty-four or forty-eight hours, depending on the condition of the bowels. I continue this until I have secured four or five intestinal evacuations for two successive days, and then I leave off the calomel and add half a grain of menthol. If, after discontinuing the calomel, there is any tendency as there frequently is, of the bowels to become inactive, I administer small doses of salts or Hunyadi water in the morning.

I always endeavor to secure two or more evacuations daily depending on the temperature and tympanites. If, after four or five days' treatment, the temperature remains high, or rises after having remained stationary, I again resort to the calomel as above, as for twenty-four hours, and it invariably reduces the temperature and results in a general improvement in the patient's condition. I continue the administration of the guaiacal,

menthol and podophyllin throughout the disease. I cannot say just what therapeutic effect may be attributed to menthol or guaiacol carbonate other than their antiseptic properties, but as guaiacol has for a long time been regarded as a valuable remedy in the treatment of tuberculosis, is it not fair, to at least assume that when absorbed into the blood, the guaiacol in some way neutralizes or antidotes the toxins and perhaps inhibits the growth and development of the specific bacillus. Regarding the variation in size of dose and frequency of calomel, the common sense and good judgment of the physician must be relied on for the successful administration of this treatment and I desire to emphasize the fact that timidity or skepticism on the part of the physician will too often result in failure; but the continuous and apparently heroic administration in the beginning of treatment, is the *sine qua non* and will invariably be rewarded by a favorable modification of the course and symptoms of typhoid fever. I would advise occasional sponging and ablutions of cold water for the good effect it produces on the peripheral circulation, the shock to the general nervous system, and the subjective sensation of the patient, but for the reduction of temperature, it is a useless procedure, for after the first few days of the disease, antipyretics of any character are not needed."—*Va. Med. Semi-Mon.*

HOW I QUICKLY CURED A COLD IN THE HEAD.—The winter just passed in the New England States has been one of unusual severity. Starting in with a severe snow storm just before Thanksgiving, we have had a succession of snows, rainy days, cloudy weather, and altogether a disagreeable time.

To cap the climax the grip has been unusually prevalent, leaving in its train all of that long list of sequelæ which appall the doctor and discourage the patient.

I had an attack of influenza about Christmas time, which, though severe, I recovered from, with but little after-effects, save a hypersensitiveness of the mucous membrane of the nose. As soon as I was nicely rid of one cold in the head, another one came until I was about discouraged. All kinds of treatment were adopted, a new one for each attack, which did not seem to do much good, the attack lasting about a week.

It seemed after an attack was over that some of the germs causing it

would retreat to breed in some of the recesses of the nose, only to come forth again on the least provocation or undue exposure to cold or dampness. It was about six weeks ago I was taken with one of the worst attacks, sneezing almost incessantly, chills and fever to start with, coryza which kept me from getting about, and my wash-woman working overtime to keep me in handkerchiefs.

This condition had lasted nearly two days, confined in-doors, a semi-invalid, afraid that the trouble would extend to my lungs and pneumonia supervene. At this time I made up my mind to give lyptol a thorough trial as a local application and as a germ killer.

It is just possible that you do not know what lyptol is, so I will state that it is an antiseptic ointment for surgical uses. The base is a thoroughly sterilized petroleum to which is added under high temperature, bichloride of mercury; the Australian oil of eucalyptus, formalin and benzo-boracic acid. I had used it quite a good deal as a surgical dressing, and as a germ killer, pus destroyer, antiseptic and healer, I found it unequalled.

Relying on this experience I commenced making local application to the inside of each nostril about 2 P. M., using the little finger and pushing the ointment as far up as possible. Inside of an hour I found that I was not sneezing so much and the irritation was considerably relieved. I continued the applications until bed-time, when I gave each nostril an extra big dose. When I awoke in the morning, I found to my amazement, that the cold was all gone; not a vestige left; nor has there been a single evidence of its return since.

I have used in eleven cases since this, in cases from youth to old age, and every time in a few hours the deed was done; the germs killed; the patient cured. It must be used freely and fearlessly and the results will be right.—*William H. Murray, Vermont Medical Monthly.*

PAINFUL MENSTRUATION. — Dr. Lawrence concludes an article on this subject as follows:

1. Painful menstruation is not a disease, but merely a symptom found in various pelvic diseases.

2. Those classifications which place it as a disease are misleading and should be discarded.

3. The physiology of menstruation, a thorough knowledge of pelvic pathology and a broad, careful habit

of study and thorough case-taking are necessary in order that menstrual pain be rightly construed.

4. Many of the cases due to the uterus, tubes, or ovaries may be cured in the early stages by simple means, whereas neglect places them in a position demanding serious operative treatment.

5. Painful menstruation in a sterile patient is strong evidence that there is a tubal inflammation with occlusion of tubes.

6. Operative procedures should be reserved for those cases in which there is a positive pathological indication; neurotic and anemic cases being treated by other and more appropriate measures.

7. As a symptom, menstrual pain is often of such grave import that it should always receive the most painstaking study. If this should be the rule, many persons will be cured without operation. — *International Jour. of Surgery.*

WHEN TO GIVE OPIUM IN DIARRHEA OF YOUNG CHILDREN.—It is contra-indicated—1, in the first stage of acute diarrhea, before the intestinal canal has been from decomposing matter; 2, where the passages are infrequent and of bad odor; 3, when there is a high temperature or cerebral symptoms are present; 4, when its use is followed by an elevation of temperature or the passages become more offensive. It is indicated—1, when the passages are frequent with pain; 2, when the passages are large and watery; 3, in dysenteric diarrhea, together with castor oil or a saline; 4, in later stages with small, frequent and nagging passages; 5, when the passages consist largely of undigested food, and the bowels act as soon as food is taken into them.—*Crandall, N. Car. Med. Jour.*

A CONTRIBUTION TO THE THERAPEUTICS OF IRON.—The skeptical assertions of Dr. Bunge, regarding the value of ferruginous medication, at the Congress for Internal Medicine, of 1895, evoked an almost unanimous and vigorous opposition in the discussion which followed the reading of his paper. The doubts expressed by him in reference to an insufficient absorption of the inorganic preparations of iron could at that time only be controverted, in the main, by the results of practical experience derived from the administration of iron. However, Quincke even then pointed out that his investigations on the subject, which had not yet

been concluded, had demonstrated the absorption of iron preparations given for medicinal purposes, and their utilization in the body. In 1896, at the Congress for Internal Medicine, Quincke reported the results of his experiments which meanwhile had been completed, and which confirmed in every respect the above-mentioned statement. He had made it his aim to trace the course of iron along the intestinal canal, by means of micro-chemical reactions and for this purpose fed white mice for a number of days with cheese, to which had been added various ferruginous preparations. The animals were killed during feeding, or after the lapse of a certain interval, and the viscera, especially the intestinal canal, hardened in alcohol, cut open and examined for the presence of iron with sulphide of ammonium as a reagent. It was thus found that iron is absorbed exclusively in the duodenum, and this applies both to the iron in the food and that administered medicinally. It was detected in the duodenal epithelium and in the stroma of the duodenal epithelium and in the stroma of the villi, and is visible even to the naked eye. Furthermore, iron is found deposited especially in the liver cells, in a form perceptible on microscopical examination, and in rare cases could be detected by microscopical means in the cortical tubules of the kidneys.

These investigations of Quincke have demonstrated incontestably that the favorable results which have been obtained, since olden times, from the administration of iron are actually attributable to its absorption, and not, as Bunge would have it, to accidental circumstances, to diet alone, or even suggestion. Control experiments in this direction with indifferent medicaments are readily carried out, and were repeatedly mentioned at the Congress of 1895. It should be added that these control experiments were followed by no change, or only by a transient improvement in the condition of the patient.

At the last Congress for Internal Medicine, the subject of the therapeutics of iron was so thoroughly ventilated by the foremost clinicians as well as by numerous physicians in late years, that a new contribution would appear superfluous. This subject, however, is of such immense importance to the general practitioner, that a cumulation of material is necessary in order to eliminate the least doubt as to the efficacy of a therapeutic measure which, originating at first on the basis of specula-

tion, and later supported by the results of empirical observations, has finally been demonstrated to be of value by exact experimentation.

In the following I will only discuss the clinical aspects of this question. I was encouraged in undertaking this work by my honored teacher, Dr. Mackenrodt, who has assisted me in every possible way. In the management of chlorosis and anæmia and the host of sequelæ of these diseases, the physician would be powerless if he had not in iron a specific, or at least a potent and indispensable adjunct to his other therapeutic resources. The patients, who belong for the most part to the working classes, give in the main the same group of symptoms: amenorrhœa, scanty or profuse, weakening, irregular, usually premature, menses; headache, anorexia and dyspepsia; neuralgias, and almost invariably marked lassitude, which interferes markedly with their ability to work. In these cases prompt and radical help must be afforded, in order to restore to the patients their full working capacity as soon as possible. It is well known that the therapeutic value of the various iron preparations differs greatly. This is shown *a priori* by the abundance of manufactured products of this kind. My experience relates chiefly to three preparations, pilulæ chinini cum ferro, formula magistralis of Berlin, liquor ferri albuminati, and the neutral pepto-mangan (Gude). My results with the first of these three remedies have been very indifferent, while with the liquor ferri albuminati of the pharmacopia, they were somewhat better. I have instituted accurate examinations, however, with only Gude's pepto-mangan, and the data given further on relate to this remedy alone. Owing to my limited experience with the many other preparations employed by various authors, I would not designate the pepto-mangan as a universal remedy, or as the only efficient preparation.

Still another remark: there can be no doubt that our medical intervention, no matter of what kind, is materially assisted by psychical impressions. This applies especially to our female patients, who are extremely susceptible to mental influences of this character. Hence it may readily occur at the commencement of treatment that the previous disorders are less strongly felt and it is, therefore, unfortunate that an objective criterion for the existing improvement is not at our disposal, as such we would regard regular ex-

aminations of the quantity of hæmoglobin in the blood. In the observations reported these were made with Gower's hæmoglobinometer. This instrument is very convenient and is superior to Fleischl's apparatus for the use of the general practitioner, especially on account of its cheaper cost. The tests are very exact; any existing errors are the less to be considered since they occur uniformly and in about the same degree during the entire course of the experiments.

That dietetic treatment alone may be successful in anæmic and chlorotic patients was laid down as a dictum by Immermann and Reinert at the Congress for Internal Medicine, of 1895. It is natural to suppose that poor and ill-nourished persons would gain in strength under the influence of a proper and invigorating diet; nevertheless, after eight to fourteen days a cessation in the improvement occurs and the old disorders return. These authors, as well as Nothnagel and v. Ziemssen, consider an invigorating diet as only a valuable adjunct; both of the latter, moreover, regard rest in bed for several weeks as an important factor in the cure. Since several years, Mackenrodt has also instituted a large series of observations of this kind, not yet published, in which, for purposes of control, he employed quantitative estimation of the hæmoglobin. It was found by him that under the influence of hygienic and dietetic regulations alone the quantity of hæmoglobin in the blood increased only at the commencement of treatment and then only in a dilatory manner.

In the case of one of my patients I proceeded as follows: I prescribed pepto-mangan (Gude), one teaspoonful three times daily after meals, and regulated the diet in accordance with the directions furnished with preparation. Sour and fatty foods, as well as raw fruits, are to be avoided under all circumstances. Fritsch (Diseases of Women, 1892, pp. 469) advises, indeed, that the desire or acids manifested by chlorotics should be gratified. According to my experience, however, this craving for acids is to be regarded as a pathological condition of the alimentary tract, which is made worse by further supply of acids, but can be successfully overcome by an unstimulating diet. In cases where the social conditions in any way permitted, I allowed the patient to take a small glass of red wine three times daily, but never during a period of one hour before

and after the administration of the medicament, in order to prevent the combination of the tannic acid contained in the wine with the iron.

The use of potatoes was restricted as much as possible, at least during the first four weeks. Furthermore, I resorted to the dietetic regulations customary in these cases, but changed them to advantage when, as so often happens, obstinate constipation was present, following in this respect the suggestions of Hebra, which have recently been again advocated by Ruge (Transactions of the Obstetrical and Gynecological Society of Berlin, I, III, 1896) and obtained generally excellent results. In contrast to several authors who made it a practice to remove any existing dyspepsia before resorting to the use of iron, I have followed the method of v. Ziemssen and Baumler, of at once administering iron—unless the presence of a severe gastric affection, especially ulcer of the stomach, could be positively determined—and observed as early as the end of one or two weeks an increase of appetite and subsidence of the gastric disorder.

I would lay especial stress upon systematic exercise in the open air. I ordered the patients, who, with but two exceptions, were treated out of bed, to take a stroll at midday, at first of five to ten minutes' duration. At the end of three to four days they were allowed to remain outdoors for five to ten minutes longer.

After each walk they were advised to take off their corsets, put on their slippers, and rest for an hour on the sofa. Under this treatment the lassitude invariably vanished after a time.

In the manner thus described I have treated in all about sixty patients. In twenty-four cases I instituted quantitative estimations of hæmoglobin at regular intervals of three, five, or eight days. Under normal conditions the quantity of hæmoglobin in woman amounts to 12.59 per cent. when estimated in comparison with the other constituents of the blood. Among my cases the lowest amount met with was, in a single instance, 30 per cent. of the normal, that is to say, of the above 12.59 per cent. Next to this was the following case with 32 per cent. of the normal:

Miss W. G., twenty-two years old, seamstress, related that she had been under treatment for four years for chlorosis. Since the age of nineteen her menses had been scanty, occurring before the usual time, and of three to eight days' duration. On

September 26, 1895, a *remotio secundinarum* occurred, after an abortion induced in the fourth month. At present she complains of darting pains in the upper portions of the lungs, headaches and rapid loss of strength.

January 9, 1896, anæmic appearance; physical examination, especially of lungs, negative. Quantity of hæmoglobin, 82 per cent. Ordered pepto-mangan (Gude), diet, etc.

January 18, 1896, considerable improvement of the general condition. Hæmoglobin, 45 per cent.

January 17, since previous day, diarrhoea, due to gross errors in diet, troublesome eructations. Ordered tinct. opil. 15 drops three times daily. Hæmoglobin, 47 per cent.

January 21, improved after use of tinct. opil., no more gastric pains or eructations. Headaches have completely disappeared, lassitude less marked. Hæmoglobin 55 per cent.

January 31, condition unchanged, ceased menstruating on previous day, the flow having lasted five days.

February 8-28, patient feels well and no longer complains of pains in the lungs. Appetite and bowels regular. Hæmoglobin, constantly 55 per cent.

March 5, no change. Hæmoglobin, 63 per cent.

March 11, hæmoglobin, 68 per cent.

March 27, hæmoglobin, 77½ per cent.

Unfortunately, as in most of these cases, the patient's visits ceased as soon as she felt entirely capable of going to work. As a matter of fact, the increase of hæmoglobin in this case was tardy, as in four other cases in which the quantity at the beginning was 34, 35, 37 and 38 per cent. of the normal. In eighteen other instances in which the initial amount was higher, viz: 42-75 per cent. of the normal, progress was more rapid as a rule.

This is most strikingly illustrated in the following case:

Miss C. B., aged fifteen years, complains of violent headaches, visual disorders, loss of appetite, a feeling of pressure over the stomach, constipation and general lassitude.

June 2, 1896, *status præcox*: mucous membranes pale; physical examination negative; heart normal; quantity of hæmoglobin, 45 per cent. Prescribed as in above case.

June 9, headache has disappeared; condition otherwise unchanged. Hæmoglobin, 45 per cent.

June 16, improvement. Hæmoglobin, 51 per cent.

June 28, decided improvement. Hæmoglobin, 55 per cent.

July 8, patient free from complaints; cheeks ruddy; lips and conjunctiva red. Hæmoglobin, 78 per cent.

July 28 and September 24, continued good health.

I also derived exceedingly favorable results from the use of Pepto-Mangan (Gude), in patients who came to us for operations after having been exhausted by protracted hemorrhages. Of course convalescence in such cases is delayed; the system recuperates but slowly from

the double inflicted by the losses of blood and the operative intervention. Digestive disturbances are especially apt to be troublesome. In these cases ferruginous medication often produces remarkable improvement.

I cannot close this paper without calling attention to the beneficial influence exerted by Pepto-Mangan (Gude), in anæmic neuralgias, and as an illustration of its effects in this class of cases, add in brief the following history of a case:

Mrs. K., aged thirty-five years, very pale and ill-nourished suffers from intercostal neuralgia on the left side.

January 30, 1896, quantity of hæmoglobin, 68 per cent. of the normal.

February 5, in the meantime has suffered on two days with violent headaches; intercostal neuralgia persists; appetite good; no gastric disturbances. Hæmoglobin, 69 per cent.

February 12, no longer troubled with headaches, with exception of one attack of neuralgia, in the area supplied by the left supra-orbital nerve. The paroxysms of pain on the left side of the chest have become less frequent. The lassitude has subsided. The mucous membranes are still anæmic. On the whole the patient feels better and more vigorous than before the commencement of treatment. Hæmoglobin, 75 per cent.

February 18, considerable improvement of neuralgias; no headaches, nor digestive disturbances. General health improved. Menses appear earlier than previously, this being the second day of the flow. Hæmoglobin, 78 per cent.

February 26, during the preceding days transient deterioration of her condition, owing to mental excitement. Menstrual period has been normal. Hæmoglobin not estimated.

March 2, patient no longer complains. Intercostal neuralgias have ceased to occur, except on rare occasions. Hæmoglobin, 76 per cent.

March 13, health good in general. Iron discontinued on account of gastric disturbances, which are said to result from excitement. Ordered strict diet and iron to be resumed.

March 19, complete restoration to health. Hæmoglobin, 82 per cent.

That the final estimates did not yield the normal quantity is not surprising, since it is frequently somewhat reduced even in healthy persons. At any rate, the objective and subjective state of the patients in the above cases, as well as in the others not reported in detail, afforded the impression that a radical cure with complete restoration of the ability to work has been effected.

It must be conceded that in matters of therapeutics it is always difficult to appreciate correctly the relation of cause and effect, and to eliminate the factor of accidents in estimating the efficiency of any plan of treatment. And in order to arrive at a positive and unbiased decision, it is necessary to resort to a series of observations and control experiments of so great an extent that the single observer, even though he have at his disposal a vast amount of ma-

terial, is only capable of furnishing a small contribution in the discussion of these questions. Furthermore, a certain amount of latitude must always be allowed to individual judgment.

Yet while fully conscious of these limitations I think I am justified in asserting that in my therapeutic trials with Pepto-Mangan I obtained all that can be rationally demanded. And I further consider myself warranted in stating that in view of the unquestionable necessity of ferruginous medication in certain troublesome constitutional affections this preparation acts as a most efficient and useful auxiliary to our therapeutic efforts.—Dr. Gellhorn, Assistant Physician, Dr. Mackenrodt's Gynecological Clinic, Berlin, *Therapeutische Monatshefte*.

SCABIES.—Sherwell, of Brooklyn, in a paper before the American Dermatological Association, condemns the treatment of scabies by irritant ointments of various kinds. He urges the adoption of a method which he declares is "better, cleaner and easier." The patient is instructed to take a thorough bath, after which sand soap is to be used upon the tougher portions of the integument. A half teaspoonful of powdered washed sulphur is then rubbed over the entire skin-surface. The same quantity should be placed between the bed-sheets and shaken so as to evenly distribute the powder. This should be repeated for several nights, a cure usually being effected in a week. The writer has never seen a dermatitis follow this treatment. He also advises its use as a prophylactic measure whenever an individual is exposed to scabies.—*N. Car. Med. Jour.*

INSANITY FOLLOWING SURGICAL OPERATIONS.—Wm. D. Granger, M. D., of Bronxdale, read a paper on this subject at the recent meeting of the New York State Medical Association, in which he said:

"A number of such cases are to be found reported in the literature, but greater attention in giving details of the patient's previous life must be reported, if the cases are to be of any value in a statistical sense. Predisposition is the all important factor. Heredity being the most active predisposer, certain critical periods, especially of the sexual life, as puberty, and the climacteric, seem to be predisposing agents. It is not

the gravity of the operation that is the most active factor, for a notable number of cases of insanity have developed after the extraction of a tooth. Eye operations furnish a good proportion, too. Most mental aberrations follow operations upon the genital tract in females. Careful inquiry should be made beforehand as to whether the subjects for operation are predisposed by previous mental trouble, or by heredity to such accidents."

Dr. C. C. Frederick, of Buffalo, in discussion, spoke of the difficulties of getting such details of patient's lives and heredity. Patients themselves are sensitive, and friends will often say nothing of the patient's neuro-pathic tendencies, so that the doctor finds out only after insanity has developed that the patient has been in an asylum before.—*Medical News*.

PTYALISM (Idiopathic or mercurial).

℞ Tinct. myrrhæ, 3 j.
Potassii chloratis, 3 vj.
Aq. camphoræ, q. s. ad 3 xvj.

M. Sig. Shake. Use as mouth wash every two or three hours.

℞ Formaldehydi (40 % sol.), 3 j.
Thymoli, gr. x.
Tinct. benzoini compositæ, 3 ij.
Alcoholis, q. s. ad 3 iij.

M. Sig. Teaspoonful in wine-glass of water as a mouth wash every two or three hours. Also apply with camel's hair brush to softened and bleeding gums.

℞ Camphoræ, 3 ij.
Tinct. myrrhæ, 3 j.
Balsami Peruviani, 3 j.
Spir. cinnamoni, 3 iv.
Ol. menthæ viridis, m v.
Ol. carophylli, m iij.
Alcoholis, q. s. ad 3 viij.

M. Sig. Teaspoonful in a wine-glass of water as a mouth wash every two hours. Also apply in full strength to softened and bleeding gums.—*Ex*.

ATROPINE FOR EXTENSIVE BURNS.

In reference to the treatment of extensive burns the *Medical Council* has this to say: As far back as 1891 there appeared in the *Medical Record* a paper by Dr. Lustgarten, in which he shows conclusively that death is due to an animal poison generated by micro-organisms that develop in the eschar. This poison he believes to either be muscarin or something very like it. This is a most virulent poison in small quantities, even five milligrammes causing severe symptoms of poisoning in man. The effect of this poison is to greatly irritate the nervous system, and it is

from nervous irritation and consequent exhaustion that these victims of extensive burns die. Atropine negatives the effect of the muscarin by paralyzing the susceptibility of the nervous system. He found the practical application of his theory to yield successful results. Cases have been saved after the onset of vomiting, and all by the prompt hypodermic injection of atropine. Improvement begins at once after the first injection, which should consist of about $\frac{1}{16}$ to $\frac{1}{8}$ of a grain. It may be repeated, if necessary, within a short time, say an hour, if no effects follow the first dose. Otherwise, it is not to be repeated until the effect of the first dose begins to leave.—*Med. and Surg. Mon.*

NEUROLOGICAL DATA.—In consulting our modern text-books on diseases of the nervous system, one cannot fail to be impressed with the therapeutic nihilism so often manifested by authorities in neurology. It is this paucity of our medical resources that has caused many of these cases to be referred to the surgeon. Although surgical treatment, however, has given good results in neuroses of distinctly traumatic origin, especially where too long a time has not elapsed since the injury, its results in other cases have been in general disappointing, as is well shown by the increasing reaction against the use of the trephine in epilepsy. The following cases have been reported with a view of demonstrating the value of a new method of treatment in various neuroses of intractable character:

CASE I.—Mr. J. N., age 21, occupation, glass packer, came to my office accompanied by his father on Sept. 3, 1898. The father stated that his boy was losing weight and that he was afflicted with peculiar spells, the nature of which he could not very well describe. The boy would occasionally do certain things apparently while in a condition of unconsciousness, and afterwards would not remember what he had done. Glass ware, given him to pack, would drop out of his hands, and this happened so frequently of late, that he was induced to ask for medical advice.

Patient fell from a truck when quite young, which left an impression on the forehead. I noticed a peculiar facial expression, due, probably, to the greater protrusion of the left eye and to the slight retraction of the head towards the left. I supposed the case to be one of the petit mal type of epilepsy, and examined

the prepulse to find any source of irritation, but found none. When questioned closely, patient admitted himself to be an excessive masturbator, and as such I treated him, advising him to have natural coitus, and prescribing for him a course of bromides and general tonics.

Patient returned after two weeks, feeling somewhat improved. The attacks, however, persisted, though they were of a somewhat different nature. He, for instance, would take a walk with some friends, when all at once he would stand still while the others passed on; his friends' admonition to be livelier, he would not hear when in this condition; at other times, when playing cards, he would stare peculiarly when his turn would come, and the repeated efforts of his friends to attract his attention would be entirely ignored while this spell lasted, for about two minutes. He had from two to four of these attacks in twenty-four hours.

I ordered him to stop work and to take moderate out-door exercise; cold sponge baths, eggs and large amounts of milk were prescribed, as were iodides, while the dose of the bromides was increased.

September 30, 1898, patient's condition remained unaltered. Treatment was continued and patient advised to report from time to time. December 15, 1898, condition appeared aggravated, having on an average four attacks every day. He was put successively on a variety of drugs until April 15, 1899, with no success whatsoever. Patient was examined by a neurologist, who was of the opinion that the difficulty was located in the frontal region, and about the fissure of Rolando, and that if he did not soon improve under the medicinal treatment, the operation of trephining would be necessary. An ophthalmologist, whose consultation I also suggested, prescribed glasses; however, without the slightest benefit to the patient, as the attacks recurred as frequently as before.

April 15, 1899, patient was put on mercauro. I started him on ten-drop doses, four times daily, to be taken in milk. Every day the dose was increased one drop until he reached 25 drops, under which dose he is at this day. The following is the patient's history while under the action of this drug:

May 7th and 8th, 2 attacks, mild. May 9th, 1 attack, mild. May 10th, 11th, 12th, 13th, 14th, 15th, none. May 16th, 1 attack, mild. May 17th, 18th, 19th, 20th, none. May 21st, 1 attack, mild. May 22d, 2 attacks,

mild. May 23d, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, none. June 1st, 1 attack, severe. June 2d, 3d, 4th, none. June 5th, 1 attack, severe.

The later attacks I attribute to the patient's disposition, who, being unable to work, feels his dependency upon others and worries in consequence thereof.

The history shows the remarkable improvement under the administration of mercauro, as patient was entirely free from spells from May 9th to 16th, and from May 22d to June 1st.

CASE II.—On August 29, 1898, I was called to Mrs. S., age 74, who had had "a weak spell," accompanied by dizziness, resulting in a fall, from which she sustained a black eye. Iodide of potassium in large doses was ordered, and, as I found patient afflicted with a cardiac disease, I prescribed some tonic medicine besides. On Nov. 2, 1898, I was summoned to the old lady, and at once noticed that she had been attacked with cerebral apoplexy. The face was retracted to one side, the left arm and leg were hemiplegic. I entertained an unfavorable prognosis, which opinion was sustained by the able physician whom I at once called in consultation. Iodides in moderate, gradually increasing doses, and tonics were administered for about one month. Applications of electricity soon had to be abandoned on account of their ill-effect upon the patient's mental condition.

In December, 1898, noticing no decided improvement, I put the patient on mercauro. I began with ten drops four times daily the first week, increased the dose to fifteen drops in the second, to twenty drops in the third, and continued to increase the dose until she was able to take thirty drops four times daily. I kept up the administration of mercauro until March 12, 1899, when patient, who could walk as well and also use her arm again as freely as before the apoplectic attack, was discharged as cured.

April 8, 1899, patient informed me that she takes walks without being accompanied, and that she feels very well with the exception of being somewhat nervous; her nervousness, I think, is attributable to her neighbors, who tell her constantly that she may shortly expect another attack.

CASE III.—Mrs. A. S., age 55, on December 21, 1898, had an attack of cerebral apoplexy, hemiplegia of left side, and retraction of face. As this case resembled case 2 almost minutely, I put the patient at once under the administration of mercauro, as I

had found that the iodides are of little use in this affection. The electrical treatment also had to be discontinued in this instance for the same reason as in the former case. The mode of administration of mercauro was as in case 2; patient reached a dosage of thirty drops, four times daily, and was able to walk and make use of her hand when treatment was discontinued in March, 1899.

CASE IV.—Mrs. J., age about 55, store-keeper, consulted me on April 10, 1899, for partial blindness of both eyes. Patient, who had been in this condition for over a year, was unable to read and saw large objects double. She also complained of intense headaches. Patient had been treated previously at an eye infirmary with little success. She entrusted herself to me knowing that I was no oculist. I diagnosed her condition as either due to cerebral thrombosis or to hemorrhage of the retina. I placed her on my favorite remedy, mercauro, again starting with ten drops four times daily and increasing the dose slowly. At one period she exhibited symptoms of saturation with the medicine. I then simply withdrew the mercauro for twenty-four hours and started her again on ten-drop doses.

On May 30, 1899, patient took forty-five drops of the drug four times a day without any gastric disturbance, her eyesight being fully restored. The treatment was continued and the patient, as a matter of prudence, was forbidden to read or to excite herself.

CASE V.—Mrs. P., age 44, store-keeper, residing out of town, consulted me on Jan. 26, 1899, for a general rheumatic condition. The pains she suffered seemed to be excruciating, so much so that at times she threatened suicide. The affection had already lasted four years and it was impossible for her to get along without morphine. I ordered her to take mercauro in the same large doses as were given in the other four cases, with the result that her condition is greatly improved, she is free of pain and need not take refuge in morphine.—*Edward L. Spitzer, M. D. International Journal of Surgery.*

TREATMENT OF APPENDICITIS WHEN PUS IS PRESENT.—G. Worlsey (*Med. Rec.*) concludes an interesting article with the following suggestions:

1. In operating on appendicitis in the presence of pus, the first consideration is the patient's lip, the second, disagreeable sequelæ, of which ventral hernia is the most common.

2. Post-operative ventral hernia may be avoided in spite of the necessary use of drainage: 1. By the use of McBurney's muscle splitting incision; 2. By suturing most of the wound; and (a) the use of provisional or secondary sutures in the part left open for drainage, or (b) early removal of the gauze drain, facilitated by the use of a rubber tissue collar where it passes through the wound, allowing the walls of the cavity and sinus to become approximated, thus avoiding the necessity of filling up by granulations.

3. The appendix should be removed if possible.

4. The relative frequency of hernia following operations on appendicitis where there is pus is another argument in favor of early operations.—*The Med. Stand.*

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Notes and Comments.

A new hypnotic and anesthetic is said to have been discovered, which neither weakens the heart nor interferes with the digestive organs. Its main ingredients are chloroform and acetone, whence its name of chlore-tone. When the substances referred to are mixed with caustic potash, a white crystalline compound is obtained which has been found to possess analgesic, hypnotic, anesthetic and antiseptic properties.

The Alvarenga Prize for 1899 has been awarded to Dr. Robert L. Randolph, of Baltimore, Md., for his essay entitled: "The Regeneration of the Crystalline Lens—an Experimental Study."

CHLORIN WATER IN TYPHOID FEVER.—The chlorin-water treatment of typhoid comes from India. The usual dose is a dram every three hours. Wilcox's conclusions, based upon an extended use of the remedy, are:

1. Chlorin can be safely used till complete disinfection of the alimentary canal is obtained.

2. It improves the appetite and digestion, lessens the fever, and cleans the tongue. The only odor to the stools is that of chlorin.

3. It causes increase of strength and lessens the nervous symptoms.

4. It shortens the duration of the disease, and under its influence the patient usually makes a rapid and complete recovery.—*Med. News*

THE PRESCRIPTION

Therapeutic Cullings.

SPERMATORRHEA.—The *Jour. de Méd. de Paris* attributes the following formula to de Sinéty.—

℞ Ext. of belladonna,
Powd. belladonna, aa gr. iij.
Conserve of roses, q. s.

M. Divide into ten pills.

If the emissions are the result of spasm of the seminal vesicles, from one to three of these pills should be taken on going to bed; or instead, $\frac{3}{4}$ grain of camphor or $1\frac{1}{2}$ grain of lupulin may be taken, or potassium bromide in daily amounts of from 15 to 60 grains.

If the spermatorrhea proceed from atony of the seminal vesicles, on the other hand, cold enemata should be employed, also cold jet douches of from 10 to 20 seconds' duration. In addition, one or two doses of the following powder should be taken with the morning and evening meals.—

℞ Freshly-powdered ergot, gr. $1\frac{1}{2}$.

Powd. nux vomica, gr. $\frac{1}{4}$.

M. For one dose.—*N. Y. Med. Jour.*

BURNS.—The *Semaine Méd.* calls attention to the following simple and effective treatment of burns, employed by C. Calliano, of Turin, with which he has been very successful and which corresponds to the latest theories in regard to burns and intoxications.

The part is first cleansed with cold sterile water or a weak antiseptic, using vinegar water for a burn from lime and slightly soapy water in case of corrosion from a mineral acid; after which cold compresses are applied, renewing or moistening with fresh cold water every fifteen minutes. These cold applications relieve

the pain at once and abolish it completely in twelve or fifteen hours, after which a compress of sterile gauze or clean cloth is dipped in boricated water at 40° C. and wrung out until only slightly moist, but still hot and absorbent and applied to the burn with an air-tight covering. If there is suppuration, this hot compress should be renewed twice a day, cleansing the parts with a stream of boricated water under gentle pressure. If the skin is very red and painful, he applies this salve:

℞ Lead carbonate,
Lead oxid., aa grm. ij.
in vaseline, grm. xv.

Or this liniment:

℞ Limewater, grm. 100.
Linseed ol., grm. 50.
Thymol, grm. i.

As suppuration diminishes, smaller and lighter compresses are applied. The patient must remain in bed during the entire time of treatment to avoid pressure on the wound, and the part must be raised, if possible, to favor the reflux of venous blood. Simple diuretics and saline purgatives should be given to promote the elimination of the toxins. If there are evidences of auto-intoxication, simple tonics are indicated. The urine should be watched and if the albuminuria increases, showing progressing auto-intoxication, injections of physiologic salt solutions are required.—*Jour. Amer. Med. Asso.*

GASTRIC HYPERACIDITY.—

℞ Sodii sulphatis, $\frac{3}{4}$ i.
Potassii sulphatis, gr. 80.
Sodii chloridi, $\frac{3}{4}$ i.
Sodii carbonatis, 3 6.
Sodii boratis, 3 $2\frac{1}{2}$.

Sig. Half a teaspoonful in half a glass of warm water before breakfast and two hours before the two other meals.—*Wolff, Med. News.*

ALTERATIVE AND ANTIRHEUMATIC.
Dr. W. F. Ball, of Mantua Station, O., sends to the *Med. Summary* the following formulæ which he has sufficiently tested. A valuable alterative compound in all cases where such a preparation is indicated:

R Fl. ext. stillingia, $\frac{3}{4}$ j.
Fl. ext. Turkey corn,
Yellow dock,
Burdock seed, aa $\frac{3}{4}$ ss.
Iodid. potass., $\frac{3}{4}$ j.
Syr. simp., q. s. Oj.

M. Sig. Teaspoonful after meals.
Special indication of the following is in rheumatism with a deep-red tongue:

R Fl. ext. cimicifuga (green root),
Fl. ext. colchicum seed, aa 3 ij.
Potass. acetate, 3 ss.
Syr. simp., q. s. $\frac{3}{4}$ iv.

M. Sig. Teaspoonful every three or four hours.

For rheumatism with a pale mucous membrane and white coating:

R Fl. ext. cimicifuga, 3 ij.
Fl. ext. colchicum seed, 3 j.
Sodii salicyl., 3 ij.
Aq., $\frac{3}{4}$ ij.
Syr. simp., q. s. $\frac{3}{4}$ iv.

M. Sig. Teaspoonful every three or four hours.—*Ex.*

THE TUBERCULIN TREATMENT OF PHTHISIS.—Dr. Boardman Reed (*International Medical Magazine*) thus concludes an important summary of the results reported at the Congress of Tuberculosis:

"The numerous efforts made in various parts of the world to modify tuberculin in such a manner as to remove its toxic power, and at the same time to retain its assumed bland or innocently acting curative principle, have been quite probably inspired by an erroneous theory. We know that we can easily poison our patients, or at least obtain disastrous physiological effects by administering too boldly and continually digitalis, mercury, arsenic, nitrate of silver, or various other active drugs. Yet instead of trying to get up some laboriously refined or emasculated preparation of them, we simply give them in doses very much smaller than those found experimentally to be dangerous, being careful not to push them too long, and meanwhile

watching carefully the results. This would seem to be the sensible way to administer tuberculin, and in this way substantially the most fortunate results reported from its use in many quarters have been obtained, whether the preparation employed was a simple dilution in carbolated water, or an expensive and mysteriously concocted modification which amounted possibly to the same thing, the active principle having been diluted by removal through filtration or otherwise sufficiently to render its effects therapeutic instead of physiologic or toxic.

It must not be forgotten, however, that the men who have reported the largest percentage of cures with tuberculin are experts in the treatment of tuberculosis, and several of them practice in places exceptionally well adapted to the arrest and ultimate cure of the disease. They have re-enforced the specific treatment not only by the help of climate, but also by the most painstaking care as to diet, exercise, clothing, oxygenation, and all other possible hygienic aids. Nor can it be objected that these other potent aids to cure, and not the tuberculin, should be given the whole credit. The physicians now referred to, being experienced and expert in the treatment of such cases, should be believed when they insist that under the same conditions otherwise their tubercular cases have done decidedly better with tuberculin added to the treatment.—*N. Y. Med. Jour.*

BLEPHARITIS.—Ichthyol ointment in blepharitis is recommended by Darier:

R Ichthyol, $\frac{3}{4}$ j.
Starch, powd., $\frac{3}{4}$ xx.
Zinc oxide, $\frac{3}{4}$ x.
Vaselin, $\frac{3}{4}$ 50.

Pediatrics.

HORSE-CHESTNUT FOR THREAD-WORMS.—Bertrand relates how by accident he seems to have stumbled upon a new remedy for oxyuris vermicularis. It is concentrated tincture or fluid extract of fresh horse-chestnut. He gave to his one patient ten drops twice a day. He advises trials and also suggests enemata of the decoction.—*Western Druggist.*

CHALYBEATE PURGATIVES.—Dr. C. E. Williams suggests the following preparations:

℞ Ferratin,
Sodium bicarbonate, aa 3 ij.
Powd. rhubarb, 3 iv.
Ol. of fennel, gtt. xxx.

M. Sig. Dose, a teaspoonful.

℞ Ferratin, 3 iij.
Ext. of aloes, gr. xiv.
Comp. ext. of rhubarb, gr. ix.

M. Divide into thirty tablets.
Sig. One or two to be taken twice a day.—*N. Y. Med. Jour.*

NEW TEST FOR LACTIC ACID IN THE GASTRIC CONTENTS AND A METHOD OF ESTIMATING APPROXIMATELY THE QUANTITY PRESENT.—J. P. Arnold (*Univ. Med. Mag.*, Vol. X, No. 7, p. 416.) ventures to present the following test for the detection of lactic acid, especially in the diagnosis of gastric carcinoma, it being simple and easily applied, the reaction characteristic and the results reliable. The test solutions used are as follows:

No. 1.

℞ Saturated solution gentian-violet (alcoholic), cc. 0.1.
Distilled aq., cc. 250.

This solution should be freshly made once a month.

No. 2.

℞ Solution ferric chlorid. (U. S. P., 1890), cc. 5.
Distilled aq., cc. 20.

In applying the test solution, put into a small porcelain capsule or test tube one cubic centimetre of solution No. 1 and add one drop of solution No. 2 from a pipette. The violet of solution No. 1 changes to a bluish-violet upon the addition of the ferric chlorid. To this mixture add, drop by drop, the filtered gastric contents. If lactic acid or lactates be present, the color of the solution changes to a green or yellowish green. In weak solutions or in the use of small quantities of the solution to be tested, the reaction is seen very distinctly at the line of contact of the drop and test solution, though the color may not be entirely changed to green when the mixture is shaken.

Alcohol, glucose, butyric acid, acetic acid and phosphates, in quantity below 2 per cent., do not interfere with the reaction as they do in Uffelman's test. The reaction is not

disturbed by the presence of acetone, albumoses, albuminoids or peptones. Sulphuric, nitric and hydrochloric acids do not give the reaction.

As regards the delicacy of the reaction, one drop of a .02 per cent. solution of lactic acid gives a very distinct reaction. The usual limit set down for Uffelman's test is the detection of .05 per cent. When a large quantity of phosphates is present, there is at first a reddish-violet produced, which, in the course of a second or two, gives way to the characteristic green. If phosphates be present to the extent of .5 per cent. it may take two or three drops of a .02 per cent. solution of lactic acid to bring out the reaction distinctly.

The reaction which takes place in this test is the combination of the lactic acid with the ferric chlorid, forming a lactate, the gentian-violet acting as an indicator. The color of the solution is not entirely changed to green until all the iron is changed to the lactate. This fact makes it possible to use the test as a means of estimating the quantity of lactic acid present accurately enough for clinical purposes.—*Amer. Med.-Surg. Bull.*

GUAIACOL IN THE TREATMENT OF TUBERCULOUS PERITONITIS.—

℞ Guaiacol, 3 ss.
Tinct. iodi, 3 ij.

Or:

℞ Guaiacol, 3 ss.
Ol. olivæ, 3 ij.

M. Sig. Apply to the skin of the abdomen in the afternoon during the highest temperature and cover the abdomen with waterproof and cotton wool.—*Ex.*

"LADY WEBSTER'S DINNER PILL."—

℞ Powd. Socotrine aloes, gr. ij.
Powd. mastich,
Powd. red rose leaves, aa gr. ss.

Med. Rec.

DYSPEPSIA WITH FLATULENCE.—

℞ Tinct. gentianæ,
Tinct. valerianæ,
Tinct. nucis vomicæ, aa 4.
Chloroformi, gtt. 20-40.

M. Sig. Ten to twenty drops in water before meals. — *Centralblatt für die gesammte Therapie.*

DIURETIC WITH IRON.—Dr. J. D. Albright says *Med. Summary*: "Instead of the old-time Basham's mixture, when a diuretic with iron is desired, use a mixture of:

℞ Tinct. ferri chlor.,
Potass. acetate, aa 3 iv.
Syr. simp.,
Aq., aa 3 ij.

M. Two or three teaspoonfuls four times a day.

This is pleasant to take and effective. It forms the acetate of iron the same as in Basham's mixture."—*Rev. Revs.*

DILATATION OF THE PERINEUM IN LABOR.—The hands are rendered aseptic and an ointment of vaseline with six per cent. each of cocaine and antipyrin is applied to the perineum, vagina and os uteri. This guards the perineum against rupture, hastens delivery and greatly diminishes its pain.—*Cormolos, Med. Rec.*

ACUTE CYSTITIS.—

℞ Ext. buchu, fl. 3 ij.
Potassii citrat., 3 iij.
Spir. ætheris nitrosi, fl. 3 iv.
Syrupi, q. s. ad fl. 3 viij.

Sig. Dessertspoonful every five hours.—*The Med. Standard.*

IRRIGATION OF THE BOWEL IN ECLAMPSIA.—Prolonged irrigation of the bowel with a normal salt solution has been used with brilliant success in the treatment of acute anemia, of eclampsia and of other conditions in which intravenous infusion or hypodermoclysis has usually been employed, says Dr. Charles Jewett, in the *Brooklyn Med. Jour.*, Grandin, Kemp and Dawbarn, of New York, have reported remarkable results from continuous irrigation of the bowel with the salt solution at a temperature of 120° F. or higher. As a diaphoretic and a diuretic it is believed to surpass all other methods. The injection is given through a double current rectal tube. The quantity of solution must be large; not less than ten to twenty gallons are frequently used. Sene (*Jour. de Med.*) reports a case in which the patient was rescued from an apparently hopeless condition by this means. The patient was a woman, the subject of a violent eclamptic attack in

the seventh month of utero-gestation. Venesection was followed by arrest of the convulsions, but the woman sank into deep coma and the urine was totally suppressed. Bowel irrigation with tepid water was then practiced for a half hour. Twelve hours later the patient had begun to rally from the stupor. A little later a small quantity of urine was passed. On the following day the coma had entirely subsided and the kidneys were acting freely. The woman was delivered on the fourth day after the eclamptic seizure and made a prompt and complete recovery.—*The Med. Times.*

PASSIVE HEMORRHAGE.—For uterine or protracted hemorrhages:

℞ Nitric acid, m xv.
Aq., 3 iv.

M. Sig. One teaspoonful every two or three hours.—*Ex.*

ANTITOXIN IN DIPHTHERIA.—Edwin Rosenthal (*Vir. Semi-Monthly*) reports a series of very instructive cases in which he used antitoxin and intubation in laryngeal diphtheria. There were 48 such cases of which 7 died. The mortality was 14½ per cent. Of these cases, 23 were intubated and 6 died. Most of these cases were seen in consultation and some were in extremis. This explains the large mortality. The time of wearing the tube varied from 27 to 575 hours. The average time being 128 hours.—*Ex.*

EXPECTORANT MIXTURE. — Beck (*Jour. de méd. de Paris*) to facilitate expectoration, recommends the following:

℞ Hydrochloride of apomorphine, gr. 1½.
Dilute hydrochloric acid, m 25.
Simple syr., m 750.
Distilled aq., m 3,000.

M. For an adult, a tablespoonful to be taken every two or every four hours. For a child, a teaspoonful at the same intervals.—*N. Y. Med. Jour.*

ALOPECIA OF THE SCALP.—

℞ Acidi gallici, 3 j.
Spir. lavend., 3 j.
Ol. recini, 3 vj.
Vaseline, 3 ij.

M. Sig. Rub well at night.—*Ex.*

COD LIVER OIL IN PHTHISIS.—The *Ther. Gas.* quotes from Crookshank as follows:

A third and very excellent method is to give the oil in small doses combined with one of certain acid mixtures. The whole then forms what Dr. Williams has called an oil-sauce. One of the best of these mixtures is made up thus:

R Acid. nitrici dil., *m* xv.
Decoction cinchonæ, fl. 3 j.

M. It sometimes sets up diarrhea, however, and if so one may try:

R Liquor. strychninæ, *m* v.
Acid. phosphor. dil., *m* xv.
Infus. quassia, fl. 3 j.

M.

A third formula is:

R Acid. sulphur. dil., *m* xij.
Tinct. aurant., fl. 3 ss.
Salicin, gr. iij.
Syr. zingib., 3 ss.
Infus. aurant., fl. 3 ss.

M.

These mixtures are excellent in themselves and form very palatable combinations with the oil. They should be dispensed separately from the oil, and the "oil-sauce" only mixed at the time of taking.—*The Med. Bull.*

USES AND DOSE OF APOMORPHINE.—Dr. Robert H. Babcock corrects from his own intimate personal knowledge of this drug many erroneous impressions current concerning it. Patients, he says, can tolerate very much larger doses than is commonly supposed and by the mouth as much as two grains at a single dose may be given without nauseating. It is more apt to cause emesis when taken in the morning before breakfast.

The combination of a small dose of apomorphine, however, with other nauseating expectorants increases their efficacy. Dr. Babcock says that its effects are so satisfactory and it is so easily administered in pill or capsule, when for any reason it is not desirable to prescribe a syrup, that it has become his favorite remedy and main reliance in the treatment of both acute and chronic bronchitis. Combined with codeine or morphine, troublesome cough can be allayed without at the same time arresting bronchial secretion; indeed, the sputum will be increased, while at the

same time the cough is moderated in violence and frequency.

The author's usual dose, administered by the mouth, appears to be about a fifth or a quarter of a grain, up to one-half and sometimes to one grain, every three or four hours. In the case of a nursing baby a sixtieth of a grain every four hours in syrup of wild cherry bark was given with great effect in constant dry cough. The author calls special attention to the necessity of obtaining pure apomorphine (and recommends Merck's) as he has seen the soporific and other effects of morphine induced by impure specimens. It must not be prescribed in mixture with potassium iodide.—*Gaillard's Med. Jour.*

ADMINISTRATION OF COD LIVER OIL. The *Gas. hebdomadaire de méd. et de chir.*, gives the following as Brice-moret's formula:

R Cod liver oil., gr. 6,000.
Syr. of balsam of tolu, gr. 3,000.
Tinct. of balsam of tolu, gtt. 12.
Ess. of cloves, gtt. 2.

M. The mixture is not to be emulsionized, but simply shaken vigorously before the dose, a tablespoonful, is poured out. After it is taken, the only taste that remains in the mouth is that of the syrup.—*N. Y. Med. Jour.*

WARM SOLUTIONS OF COCAINE.—The local anesthetic effect obtained with cocaine is more rapid, more intense and more lasting if the solution is warm. The dangers of intoxication are thus much diminished, as the quantity of cocaine can be very much reduced if it is warmed. A solution of 0.5 or 0.4 per cent. heated will produce a powerful effect.—*Da Costa, Ex.*

SUPPOSITORY FOR INFANTILE DYSENTERY.—The *Wiener Med. Blatter* gives the following, taken from the *Jeshenedelnik*:

R Neutral aluminum and potassium sulphate, G. 3.0.
Lead acetate, G. 0.3.
Cacao butter, G. 300.0.

Divide into ten suppositories. One to be employed every three hours.—*N. Y. Med. Jour.*

PERTUSSIS.—In an elaborate paper read before the New York County Medical Association recently, Louis Fischer advises the use of bromoform in gradually increasing doses. He commences with one drop at the first year, three times a day and gives one drop more for each year until five drops are given three times a day at the fifth year. He then gives this same dose until the tenth year is reached. When bromoform does not act promptly, he then advises giving:

℞ Ichthyol puri, gtt. 2.
Hydrarg. bichlorid., 0.002.
Glycerini, gtt. 20.

M. To be given three to four times daily. Fresh air must not be forgotten.

Cod liver oil or sometimes malt extract is absolutely necessary to bring the system to its normal standard.—*Ex.*

PAINLESS ARSENIC PASTE.—Badal renders Czerny and Trunck's arsenic treatment of cancer painless by adding orthoform as an anodyne, according to this formula:

℞ Arsenic,
Orthoform, aa grm. 1.
Alcohol,
Aq., aa grm. 75.

If a stronger paste is desired the amount of the menstruum may be reduced one-half.—*Med. Standard.*

ASTHMATIC ATTACKS.—

℞ Tinct. stramonii, 3.
Ammon. carbon.,
Magnesii carbon., aa 1.5.
Sodii bicarb., 5.
Pulv. rhei, 0.5.
Chloroformi, gtt. 10.
Aq. menthæ piper., 100.

M. Sig. Tablespoonful in a wine-glassful of water t. i. d.—*Murray, Med. Rec.*

DENTIFRICE.—

℞ Strontium carbonate, 3 1/2.
Sublimed sulphur, gr. 45.
Powd. medicinal soap, 3 4.
Ess. of rose, gtt. 6.

M.—*Netral, Phil. Med. Jour.*

PYRAMIDON IN TYPHOID FEVER.—The use of pyramidon or di-methyl-amido-pyrazolon in typhoid fever has proven unsuccessful. Used in the

ordinary dose of 0.1 to 0.2 grm. twice a day, there was an antipyretic action, but it was slow and uncertain. There was a very great increase of sweat, weakness and in one case collapse, symptoms which occur with other antipyretics, but to a lesser degree.—*Brandeis, Ther. Monats.*

REMOVAL OF SUPERFLUOUS HAIR.—

℞ Tinct. iodi, parts 3.
Ol. terebinth, parts 6.
Ol. ricini, parts 8.
Spir., parts 48.
Collodii, parts 100.

M. Sig. The affected part is to be painted with this mixture once daily for three or four successive days.

When the collodion scab is removed the hairs will be found imbedded on its lower surface.—*Putte, Mass. Med. Jour.*

BURNS.—Walton, of Ghent, has used the following ointment in the treatment of burns:

℞ Aristol, part j.
Sterilized olive-ol., parts ij.
Vaselin, parts viij.

M. Around the edges of the burns, after the ointment is spread, he dusts the aristol in powder form. In burns of small extent he employs the powder form only. Nolda employs the following:

℞ Europhen, part j.
Vaselin,
Lanolin, aa parts x.

M.—*Ther. Gaz.*

INTESTINAL ANTISEPTIC MIXTURE. De Maximovitch is credited with the following formula:

℞ Naphthol, gr. 45.
Chloroform, m 10.
Ol. ricini, 3 3.
Ol. menth. pep., gtt. 5.

M. Sig. Tablespoonful (for children a teaspoonful) per dose in port wine, beer or hot and sweetened black coffee.—*Med. Rev. of Rev.*

AMENORRHEA.—

℞ Strych. sulphat., gr. ss.
Ferri peptonat.,
Magnani lactat.,
Scammonii, aa gr. xx.

M. ft. pil. No. 40. Sig. Two to four pills at night.—*Gutaud, Med. News.*

LOCAL USE OF COD LIVER OIL.—Dr. A. Bethune Patterson, of Atlanta, Ga., writes to the *Atlanta Med. and Surg. Jour.* concerning the value of cod liver oil in eye and laryngeal troubles. To a child suffering from corneal ulcers he gave:

℞ Hydrarg. chl. mit., gr. j.
Santonin, gr. ss.
Sugar of milk, q. s. to make one powder.

To be given at bed-time and repeat if necessary next morning.

Also

℞ Pure cod liver oil, sterilized, ʒ j.

Atropine, gr. j.

M. Sig. Drop in eyes every three or four hours and to be bathed frequently with antiseptic lotion of boric acid. Emulsion of cod liver oil in teaspoonful doses three or four times a day.

In a child suffering from phlyctenular ophthalmia good results followed the use of hydrarg. chl. mit. and santonin, ½ grain doses night and morning until bowels are freely moved, together with:

℞ Atropine, gr. j.
Fl. ext. hydrastin, m x.
Glycerin, m xx.
Aq., ʒ j.

M. Sig. Drop in eyes three or four times a day. Teaspoonful doses of emulsion of cod liver oil three times a day.—*The Med. Bull.*

ATROPHIC PHARYNGITIS.—

℞ Pilocarpinæ muriatis, gr. ij.
Aq.,
Glycerini, aa ʒ j.

M. Sig. One dram t. i. d.—*Sa-jous, Med. Rec.*

ACUTE GONORRHEA.—Dr. Paul J. Rosenheim gives some reflections in *The International Jour. of Surgery* which sum up as follows:

1. Injections to be of greatest benefit should be retained by the patient from ten to fifteen minutes. Neisser recommends thirty minutes.

2. Janet's irrigation method of treatment, which has been advocated by Valentine, is very satisfactory. For these irrigations use protargol 1-2000 increased to 1-1000.

3. Gonococci should be attacked at once and not a week or so lost by preliminary internal treatment.

4. Internal treatment should assist local applications and salol, oil wintergreen, oil sandalwood, bicarbonate of soda and diluents are recommended.—*Ex.*

AMENORRHEA.—

℞ Tinct. ferri chloridi, ʒ iij.
Tinct. cantharidis, ʒ j.
Tinct. gualiaci ammoniatæ, ʒ iss.

Tinct. aloes, ʒ iv.

Syr. simplicis, q. s. ad ʒ vj.

M. Sig. Tablespoonful three times a day.—*Deweese.*

℞ Ext. aloes, ʒ j.
Ferri sulphatis exsiccati, ʒ ij.
Asafoetidæ, ʒ iv.

M. ft. pil. No. 100. Sig. One pill three times a day.—*Goddell, The Atlanta Med. and Surg. Jour.*

ENLARGEMENT OF THE PROSTATE.—

In the ordinary cases of prostatic enlargement, of however long standing, in which the obstruction is not great and the power of the bladder is fair, in which there is not an excessive amount of residual urine, in which catheterism is easy and painless and in which cystitis, if it exists, is not severe and can be controlled by aseptic washings and regular catheterism, operative treatment is not indicated.—*Alexander, Ex.*

HEMORRHOIDS.—

℞ Bismuth subnit., ʒ i.
Hydrarg. chlorid. mit., gr. 40.
Morphinæ, gr. ʒ.
Glycerini, ʒ 2.
Vaselini, ʒ i.

M. Sig. Use in pile pipe.—*Al-lingham.*

℞ Ungt. bellad., ʒ ij.
Camph.,

Tinct. camph. comp., aa ʒ j.

M. et ft. ungt. Sig. Apply to painful piles.—*Neligan, Pract. Med.*

EARLY DIAGNOSIS OF PREGNANCY.—

G. Reusner (*St. Petersburg Med. Woch.*) calls attention to the characteristic pulsation which is present in the lateral uterine arteries in the posterior vaginal vault. The pulsation is strong and distinct during the early part of pregnancy. The author also states that the diagnosis can be made as early as the fourth week.—*Ex.*

HEMORRHOIDS.—

- ℞ Ol. theobrom., $\frac{3}{4}$.
Ext. krameriae, gr. 40.
Pulv. opii, gr. 5.

M. secundum artem, ft. suppositoria No. x. Sig. Use one morning and evening.—*Pancoast*.

- ℞ Chrysarobin, gr. xv.
Iodoformi, gr. v.
Ext. bellad., gr. viij.
Ol. theobrom., 3 vj.

M. ft. in supposit. No. x. Sig. One to be inserted into rectum every day. (Internal hemorrhoids).—*Pract. Med.*

ICHTHYOL IN NEURALGIA.—According to Erlenmeyer (*Centralblatt für die gesammte Therapie; Riforma medica*) ichthyol is an excellent remedy for neuralgia, when locally applied, according to the following formula:

- ℞ Ichthyol, gr. 300.
Absolute alcohol,
Sulphuric ether, aa $\frac{3}{2}$.

M. To be rubbed into the affected part.—*N. Y. Med. Jour.*

FORMULA FOR THE ADMINISTRATION OF CASCARA SAGRADA.—

- ℞ Ext. cascar. sagrad., gr. xxx.
Ext. frangulæ, gr. xv.
Pulv. aloes,
Ext. gentian, aa 3 j.
Saponis, q. s.

M. ft. pil. No. 80. Sig. One pill at night.—*Pruys, Med. Rev. of Rev.*

SUBCUTANEOUS INJECTIONS OF SERUM IN SUMMER DIARRHEA.—Reichnock (*Arch. of Pediatrics*). The indications for the injection of serum in diarrhea are excessive loss of fluid from the intestines and inability to take anything by the stomach. It is a means of giving nourishment to the patient with stomach and intestines at rest. The observations were made at Ranke's clinic, in Munich, in fifteen patients. Sterilized serum from healthy cows and horses was used. The cases selected were injected on the second or third day of the illness. They were greatly reduced in weight. Some were partially moribund. The ages of the patients varied from fourteen days to nine months. From ten to twenty cubic centimeters were injected at one time. No unpleasant symptoms

followed in any of the cases. The beneficial effects were soon noticeable in an improvement in the general condition. In a few it was necessary to repeat the injections after twenty-four hours. The amount of albumin contained in the twenty centimeters, according to Hoppe-Seyler, is one to five grains. Four cases were fatal.—*The Med. Standard*.

JOINT PAIN.—Dr. T. H. Manley (*Kansas City Med. Rec.*) recommends the following:

- ℞ Acidi salicylici, 3 4 $\frac{1}{2}$.
Tinct. opii, 3 3.
Spir. vini rect. dil., $\frac{3}{2}$.
Ol. terebinthin, $\frac{3}{2}$ 50.
Ol. dulcis, q. s. ad $\frac{3}{2}$ 8.

M. Sig. Liniment.

We must eliminate the opium tincture in growing children. It may be applied by inunction or by saturated flannels. The hand must be well oiled which is to rub it in.—*Med. Rev. of Rev.*

TYPHOID FEVER.—Dr. J. Sanderson Christison writes to the *Jour. of the Amer. Med. Asso.* that to control hemorrhage he has adopted the following prescription, which is only modified to meet the factors of the personal equation:

- ℞ Spir. terebinth. rect., 3 j.
Spir. juniper, 3 ss.
Fl. ext. hamamelis, $\frac{3}{2}$ ij.
P. acacia, $\frac{3}{2}$ iss.
Aq., q. s. ad $\frac{3}{2}$ vj.

M. Sig. Dessertspoonful every four hours while awake.—*Ex.*

EPILEPSY.—The *Med. Herald* quotes the following prescription:

- ℞ odium bromide, 3 i .
Sodium bicarbonate, $\frac{3}{2}$ ss.
Tinct. of physostigma, 3 i $\frac{1}{4}$ —iss.
Aq., $\frac{3}{2}$ viss.
Saccharin, gr. iij.

Dose. Mornings and evenings a tablespoonful, diluted with water; after four days, stop for three days, then commence again.—*Ex.*

IRRITABLE BLADDER.

- ℞ Acid benzoici, grm. 4.
Borax, grm. 4.5.
Aq., grm. 120.

M. Sig. Three large teaspoonfuls a day. (Relieves frequent desire to urinate).—*Ex.*

PHARANGITIS.—

℞ Tinct. ferri chloridi, *m* xxiv.
Potassii chloratis, gr. xxiv.
Syr. zingiberis, ʒ j.
Aq., q. s. ad ʒ iij.

M. Sig. Dose, one dram every two hours for a child of two years.—*Powell*.

℞ Tinct. aconiti rad., gtt. xv.
Acidi hydrocyanici dil., gtt. xx.
Liq. ammonii acetatis, ʒ ij.

M. Sig. Dose, one dram every two or three hours, according to severity of attack. (Acute or subacute.)

OLD FRACTURES OF THE PATELLA. Subercase (*Therapeutic Gazette*) holds that unless the interval be very short cure is hardly possible without surgical intervention, which should be undertaken as soon as the formation of callus is nearly or quite over—that is, about three months after the injury. If extension be deficient, the fragments should be united by suture. If they cannot be brought together, he recommends osteotomy of the tuberosity of the tibia, or section of the tendon of the patella. In other cases the upper fragment of the entire patella may have to be removed. Cautious early movements (ten days after operation), and progressive exercise, massage and electricity may give good results.—*Ex*.

DYSPEPSIA AND GASTRO-ENTERITIS.

℞ Creosote (beechwood), gtt. iij.
Alcohol, *m* xv.
Powd. acacia, ʒ iiss.
Syr., fl. ʒ j.
Orange-flower aq., fl. ʒ iiss.
Aq., q. s. to make fl. ʒ iij.

Dose, a teaspoonful for children, a tablespoonful for adults, three times daily, before meals.—*Zangger, The Phil. Med. Jour.*

THE TREATMENT OF VOMITING IN PHTHISIS.—Matthieu (*British Medical Journal*), after pointing out that as a rule little benefit is experienced by the use of opiates and counter-irritants in the treatment of vomiting after food in phthisis, these methods being directed to lessening cough, says that attention should really be paid to the gastric mucous membrane. He has obtained excellent results from small pieces of ice given

immediately after meals, and equal success from chloroform water and menthol after food. Attacks of cough are thus lessened or suppressed and do not cause vomiting. Ferrand stated that vomiting was often due to exaggerated sensibility of the pharynx, and he uses in such cases a solution of potassium bromide in glycerine to the throat, preferably before food.—*Ex*.

DIURETIC PILL IN DROPSY OF CARDIAC ORIGIN.—

℞ Scillæ pulv.,
Digitalis pulv.,
Caffeina citrata, aa gr. xxx.
Hydrarg. chloridi mitis, gr. v.
M. Divide in pil. xxx. Sig. One three times a day, after meals.—*Ex*.

LEAD COLIC.—

℞ Epsom salts, ʒ j.
Dil. sulphuric acid, ʒ j.
Aq., ʒ iv.

A tablespoonful three times a day, preceded by ten grains of potassium iodide.—*Brunton, Med. World*.

IODIDE OF POTASSIUM PILLS.—The *Clinica moderna* recommends:

℞ Iodide of potassium, gr. 150.
Sugar of milk, gr. 75.
Lanolin, gr. 45.

To make fifty pills.—*N. Y. Med. Jour.*

NEPHRITIS.—Dr. Julia reports a number of cases of acute nephritis improved or cured by the treatment as suggested by Molliere of inunctions of nitrate of pilocarpin gr. ¾–1½ in ʒ iij. of vaseline, every morning, in the dorso-lumbar region. The surface is subsequently covered with cotton.—*American Year Book*.

STYES.—

℞ Ext. belladonna fl., gtt. iij.
Aq. dest., ʒ ij.

M. Sig. Teaspoonful every hour in conjunction with one-eighth grain calcium sulphid.—*McGee, Periscope*.

IRRITABLE BLADDER.—(K. D., Ohio) the following is recommended:

℞ Saloli,
Tinct. hyoscyami, aa ʒ ij.
Inf. buchu, q. s., ad ʒ vj.

M. Sig. One tablespoonful three times daily.—*Med. Standard*.

PRURITUS OF THE GENITALS.—Cumston (*Med. Rec.*) recommends the following:

R Menthol, parts 4.
Alcohol, parts 30.
Aq. dist., parts 60.
Dil. acetic acid, parts 150.

Sig. Apply locally.

Or

R Acid. carbolic, parts v.
Hydrated potash, parts ij.
Linseed ol., parts xxx.
Ol. bergamot, q. s.

Sig. Apply at bedtime.—*N. Y. Poly.*

CIMICIFUGA FOR TINNITUS AURIUM.

At the last French Congress of Otology, Robin and Mendel mentioned the use of *cimicifuga racemosa* as a remedy for tinnitus aurium. Mendel now reports (*Journal des praticiens*) further operations with the drug, which he has used in the form of the fluid extract in daily amounts of from fifteen to thirty drops. In a fair proportion of the cases it stops the annoying subjective noises, but in some it fails. When it is effective it is very rapid in its action, putting an end to the tinnitus, for the time being at least, in two or three days.—*N. Y. Med. Jour.*

GASTRIC ULCER.—

R Codein. phosph.,
Ext. belladonnæ, aa gr. 5.
Bismuthi carb., gr. 50.
Lactose, 3 i.

Ft. chart. xv.

M. Sig. Take two or three powders daily.—*Leube, Med. News.*

THE POWER OF THE IMAGINATION.

Dr. Preston Steele, of Titusville, Pa., tells the following story in the *New York Medical Journal*, a story not merely highly entertaining, but also thoroughly illustrative of the power of mind over matter. He says:

"On November 15, 1897, I was called to see a primipara, aged 20 years, in labor. The labor was a rather quick and easy one. The child weighed seven pounds and a half. The next day both mother and child were doing well. At twelve o'clock that night, or twenty-four hours after the delivery, I received a telephone call to come at once. Upon my arrival I was told that blood poisoning had

set in, and was shown a large, irregular-shaped spot upon the abdomen. The spot was of a dark bluish color, very sensitive to the touch, and measuring, perhaps, seven inches in diameter. The patient complained of terrible pain over the region of discoloration. The pulse and temperature were normal.

Upon a close examination I discovered that she had used a flannel bandage with the maker's stamp on one end. The use of warm water and soap was followed by instantaneous and complete recovery."—*Ex.*

PIGMENT SPOTS.—

R Hydrarg. bichlorid., 0.5.
White of egg, 0.1.
Sacchari, 15.0.
Succ. citr., 30.0.
Aq. destil., 150.0.

M. D. Sig. To be applied in the morning and allowed to dry.—*Ex.*

TREATMENT OF TONSILLITIS.—With this disease or affection, as with many others, the treatment is decided in a measure by the cause; but referring to the ordinary attacks as seen by every physician, there is no remedy of so much value at the onset as aconite (*Jour. of Med. and Science*). The tincture of the root given in one-quarter to one-half drop doses every two or three hours will often, with a proper laxative, preferably calomel, abort an attack, or limit its run to a few hours. The use of the tincture of iron is of great advantage. In cases associated with or occurring in a rheumatic subject, at the onset the free administration of ammoniated tincture of guaiac is of undoubted usefulness. Later in the case, associated with the administration of the tincture of iron, salicin or salicylic acid is useful. A remedy which can always be had, as a rule, is hot water, and its free use as a gargle and also sipping gives much comfort to the afflicted one.—*The Med. Standard.*

MENTAL DEPRESSION IN PELVIC DISEASES.—

R Strychn. sulph., gr 1-24.
Quinin. sulph.,
Ext. hyoscyami, aa gr. 1 1/2.
Ferri redacti, gr. i.

M. For one pill. Dose, one pill thrice daily.—*Talley, Med. Rec.*

CATARRH OF THE NOSE AND THROAT FOLLOWING INFLUENZA. — Fürst, of Berlin (*Deutsche Med. Ztg.*) recommends a spray of the following ingredients:

- ℞ Menthol, 4.0.
Eucalyptol, pur. alb., 2.5.
Ol. terebinth. rectif., 5.0.
Ol. pin. prunil., 1.0.

M. Sig. Two to four drops in a nasal inhaler, to be warmed before using.

In practice I usually cleanse the nose and throat with some antiseptic solution, such as Seiler's tablets or listerine, before using the spray. The application of a saturated solution of iodoform and ether, followed by a spray of menthol and albolin X to the ounce are found very efficacious.—*Ex.*

LOCAL TREATMENT OF RHEUMATISM.

- ℞ Methyl salicyl., 12.
Vaselin liquid, 20.

Or:

- ℞ Acidi salicylic, 4.
Vaselin, q. s. ad 20.

Or:

- ℞ Acidi salicyl., 4.
Sodii salicyl., 3.
Ext. belladon., 1.
Vaselin, 25.

M. Sig. Apply locally.—*Lemoine, Med. Rec.*

SYPHILIS.—Dr. W. C. Heggie (*The Dominion Medical Monthly; Ontario Medical Journal*) writes: "My experience in treating some four hundred syphilitics during the past two years has been that in the true syphilitic stage mercury is the remedy *par excellence*. In the sequelæ potassium iodide stands without a rival. Of all the preparations of mercury the bichloride easily takes the lead, especially immediately after infection. I usually begin treatment with one grain of calomel every hour till the bowels are thoroughly flushed; then put the patient on:

- ℞ Hydrarg. bichlor., gr. $\frac{1}{4}$ — $\frac{1}{2}$.
Nucis vomicæ, *m* 10.
Ext. phytolaccæ dec., *m* 2.
Aq., q. s. ad $\frac{3}{4}$ 2.

M. To be taken four times daily.

I begin with one-sixteenth grain of bichloride and increase the dose till I get an apparent effect. I am not afraid of salivation; in fact, con-

tinue the remedy until mercurialization begins to develop, when the remedy is stopped and the patient put for a week or more on the vegetable alteratives. The emunctories should be kept open and a hot bath given twice a week. Any complications should be treated in conjunction with the antisypilitic treatment, which should be continued for at least six months after all symptoms disappear."—*Med. Record.*

SOLUTION TO VAPORIZE IN THE CHAMBER OF PHTHISICAL PATIENTS.—The *Riforma medica* recommends the following:

- ℞ Solution of formalin, (40 per cent.), *m* 600.
Beechwood creosote, *m* 150.
Turpentine, *m* 375.
Menthol, gr. 60.

Twenty to thirty drops to be heated on a metal platter.—*N. Y. Med. Jour.*

ICHTHYOL IN PULMONARY TUBERCULOSIS.—Dr. Branthorne recommends an alcoholic solution of ichthyol (one part of ichthyol to two of alcohol) thirty drops in water several times a day. The dose is increased daily by two drops till it reaches one hundred and fifty drops per day. Ichthyol is not only not injurious to the stomach, but even beneficial in cases of atonic dyspepsia. It is administered to patients in whom creosote is contraindicated. While the latter exerts its principal effect on local symptoms, the action of ichthyol is said to influence the whole organism. It is not only antibacillary in its effect, but, like arsenic, it exerts an effect on the digestive apparatus and on nutrition. It is probably best used when alternated with creosote.—*Ex.*

STOMATITIS APHTHOSA.—The ulcers must be frequently touched with a cotton swab dipped in one of the following solutions:

- ℞ Sod. salicyl., 20.0.
Aq. distill., 100.0.
℞ Sod. borici, 3.6.
Sod. salicyl., 5.0.
Tinct. myrrhæ, 4.0.
Aq. distill., 30.0.

The patient must drink only boiled or sterilized milk.—*Pediatrics.*

IODIN FOR ACUTE GASTRO-ENTERITIS.—Iodin has been recently recommended by Grosch and P. A. Bizine, of Russia, also proclaims its remarkable efficacy in acute gastro-enteritis. He administers to children with diarrhea or cholera infantum, a teaspoonful every hour of the following:

- ℞ Emulsion of castor ol., grm. 180.
 Ess. of peppermint, gtt. 3.
 Ess. of cloves, gtt. 5.
 Tinct. of iodine, gtt. 10.
 Chloroform, gtt. 2.

The bottle must be kept on ice to prevent decomposition. If a slight diarrhea persists after the contents have been taken, he gives two powders a day, in water, as follows: Iodized starch, 75 centigrams. For six powders. The proportions are increased for an adult:

- ℞ Emulsion of castor ol., grm. 180.
 Ess. of peppermint, gtt. 5.
 Essence of cloves, gtt. 7.
 Tinct. of iodine, gtt. 15.
 Chloroform, gtt. 5.

A tablespoonful every hour. When the principal morbid symptoms have subsided — usually in twenty-four hours—he gives 60 centigrams of iodized starch every four hours. In cases of cholera nostras he administers the following at one dose:

- ℞ Castor ol., grm. xx.
 Ess. of peppermint, gtt. iij.
 Tinct. of iodine, gtt. x.
 Chloroform, gtt. ij.

Supplementing the medicine with an injection of tepid water if the purgative effect is not prompt; hydrochloric lemonade for beverage; mustard plasters on the joints to relieve cramps and hot water bottles to keep the patient warm, completing the treatment with the iodized starch as above.—*Semaine Méd.*

TINNITUS AURIUM.—For tinnitus aurium, not dependent on any disease of the ear (even though there be a collection of cerumen), Model and Robin (*La Méd. Moderne*) employed successfully cimicifuga racemosa, which usually stopped the noise in the course of three days after the beginning of the treatment. The average dose was thirty drops *per diem*; it failed in cases that had lasted for over two years. The author con-

sidered the buzzing in the ear as due to a reaction of the auditory nerve, which is subjected to a direct or indirect irritation. Cimicifuga racemosa, which is known to act as an antispasmodic in labor, also as a diaphoretic and somnifacient, as well as an efficient remedy in pruritus, exerts an influence on the circulation of the ear and on the reflex irritability of the auditory nerve.—*Boston Med. and Surg. Jour.*

PULMONARY TUBERCULOSIS.—

- ℞ Potassi iodidi, gr. xiv.
 Iodi pur., gr. xv.
 Sodii chloridi, 3 iss.
 Aq. dist., O ij.

M. Sig. Take three or four tablespoonfuls in a glass of milk three to six times daily.—*Renzi, Jour. de Med. de Bordeaux.*

COBALT NITRATE A HYDROCYANIC ANTIDOTE.—The *Medical Standard* quotes the *Amer. Pract.* as authority for the statement that cobalt nitrate has been successfully used as an antidote in some forty cases of poisoning by potassium cyanide and hydrocyanic acid, after having been proved effective on animals.—*Ex.*

LOCAL ANESTHESIA FOR EXTRACTION OF TEETH.—

- ℞ Menthol, gr. 160.
 Tinct. myrrh, m 80.
 Alcohol, ℥ 2.

M. Sig. Thoroughly dry the gums and apply freely for a few minutes. Use more freely than for a deciduous tooth.—*Pediatrics.*

GONORRHEA.—Vatter prescribes the following:

- ℞ Hydrastine bichloride, gr. 3¾.
 Antipyrine, gr. 375.
 Distilled aq., ℥ 6¾.

M. Four injections daily, to be retained as long as possible. The antipyrine serves to stay the smarting.—*N. Y. Med. Jour.*

RHEUMATIC PHLEBITIS.—Hirtz recommends the external application of salicylic acid as follows:

- ℞ Acid salicylic, 3 iv.
 Morphin. hydrochlorat., gr. v.
 Lanolini, ℥ j.

M. Sig. Use as an ununction twice daily.—*Med. Rev. of Rev.*

"CHELSEA PENSIONER" FOR RHEUMATISM.—

R Powd. guaiacum, $\frac{3}{4}$ j.
 Powd. rhubarb, 3 ij.
 Bitartrate of potassium,
 Sublimed sulphur, aa 3 j.
 Powd. nutmeg, $\frac{3}{4}$ ss.
 Honey, lb. j.

Mix thoroughly. Sig. Two large tablespoonfuls to be taken night and morning.—*Med. Rec.*

ECZEMA-ERYTHEMA-HERPES.—The irritation of the skin is considerably ameliorated by the employment of an ointment consisting of:

R Cocaine mur., gr. xxiv.
 Bism. sub. nit., 3 iss.
 Lanoline, $\frac{3}{4}$ j.

M. et ft. ungt. Sig. Apply *pro re nata*.—*Med. Rev. of Rev.*

THE USE OF STROPHANTHUS.—The advantages which strophanthus possesses over digitalis may be summed up as (1) greater rapidity, modifying pulse-rate within an hour; (2) absence of vaso-constrictor effects; (3) greater diuretic power; (4) no disturbance of digestion; (5) absence of cumulation; (6) greater value in children; and (7) greater safety in the aged.

When we consider that, although digitalis has been in use since 1875 in the treatment of cardiac disease, it is only within the past ten years that it may be truly said that its administration was productive of uniformly excellent results. That this is so is undoubtedly due to the fact that the greatest danger from its use—namely, the marked vaso-constriction—has been to a considerable degree obviated by the coincident administration of a nitrite. Strophanthus was first brought to the notice of the French Academy of Medicine in 1865, but its first practical demonstration as a valuable heart remedy came twenty years later, when Frazer published the results of his long-continued and patient researches. With the wider and more rapid dissemination of knowledge which obtains at the present day we may have strophanthus used as carefully as is digitalis to-day. That it possesses distinct advantages over the latter drug is undoubted, and it is equally certain that it is free from

the greatest danger which the use of digitalis entails, namely, vaso-constriction.

We may say that success in the administration of strophanthus requires:
 1. An active, well-made preparation from a reliable source. 2. Avoidance of its use in fully or over-compensated hearts, in those which present advanced muscular degeneration or mechanical defects of high degree. 3. The use of not too large or too frequently repeated doses. From my own observations, the dose of five drops of a reliable tincture three or four times a day is sufficient.—*Wilcox, Amer. Jour. Med. Science.*

FISSURE OF ANUS.—For the relief of painful anal fissure, Allingham recommends the following ointment:

R Ext. of hemlock, grm. v.
 Castor oil., grm. xv.
 Lanolin, grm. xxx.

To be applied to the parts after each action of the bowels.—*The Practitioner.*

INTESTINAL ATONY. — Huchard (*Gaz. des Hôpitaux*) gives the following:

R Benzoate of sodium,
 Powd. rhubarb, aa gr. 75.
 Powd. nux vomica, gr. $\frac{1}{4}$.

M. For one cachet. Two or three to be taken daily.—*N. Y. Med. Jour.*

NASAL CATARRH.—

R Iodine, re-sublimed, gr. v.
 Potass. iodid., gr. x.
 Zinc sulpho-carb., gr. xx.
 Listerine, $\frac{3}{4}$ j.
 Aq., q. s. ad $\frac{3}{4}$ iv.

M. Sig. Apply once daily.—*The Med. Summary.*

NEURASTHENIA.—

R Peacock's bromides, $\frac{3}{4}$ j.
 Liquoris potass. arsenitis, 3 iss.
 Ext. ergotæ,
 Tinct. opii camphoratæ, aa $\frac{3}{4}$ j.
 Aq., q. s. ad $\frac{3}{4}$ iv.

M. ft. sol. Sig. Teaspoonful in water after meals.—*Ex.*

GARGLE FOR QUINSY SORE THROAT.

R Creasote, gtt. viij.
 Glycerin,
 Tinct. myrrh, aa $\frac{3}{4}$ ij.
 Aq., $\frac{3}{4}$ iv.

N. Y. Med. Jour.

CHOLERA MORBUS.—In the early stage of active vomiting and diarrhea the following formula has been used with the most satisfactory results:

- R Acidi carbolici, gr. viiss.
Glycerinæ, 3 v.
Tinct. opii camphorata, ʒ ij.
Aq. cinnamoni, ʒ iiss.

M. To an adult give one teaspoonful immediately after each paroxysm of vomiting until the paroxysms cease to recur.—*Mon. Cyclopædia of Practical Medicine.*

ACUTE BRONCHITIS.—

- R Tinct. hyoscyamus,
Tinct. opii camph., ʒ ss.
Spir. æth. comp., 3 ij.
Syr. tolu, q. s. ad ʒ ij.

Sig. Teaspoonful every two hours.
The Med. Summary.

CHRONIC CONSTIPATION.—

- R Aloin, gr. 15.
Atrop. sulph., gr. ¼.
Strych. sulph., gr. i.

M. et ft. pil., No. 30. Sig. Take one pill morning and evening.—*The Med. Standard.*

URANIUM IN THE TREATMENT OF CORYZA.—The *Rev. Medicale* gives the following formula:

- R Uranium acetate, parts j-ij.
Distilled aq., parts xx.

M. Two or three drops to be snuffed up daily.—*The North Amer. Med. Rev.*

GASTRIC ULCER.—

- R Codein. phosph.,
Ext. belladonnæ, aa gr. 5.
Bismuthi carb., gr. 50.
Lactose, 3 i.

Ft. chart. xv. M. Sig. Take two or three powders daily.—*Leube, Med. News.*

ARSENIC AS AN ANTIDOTE TO THYROID EXTRACT.—MM. Bedard and Mabile, of Lille (*Gaz. Hebdomadaire*) have proved by experiments on dogs that arsenic is an antidote for the thyroid extract. It is known that authors say that large doses of the extract from the thyroid gland have caused serious disturbance in the action of the heart. These evidences of heart poisoning are easily obtained by feeding dogs on the thyroid gland. If, while the animals are using the

thyroid, they are given arsenic at the same time, in the form of Fowler's solution, the glandular substance may be given freely without producing any cardiac disturbance. It seems, therefore, very desirable to give arsenic when treating patients with extract of the thyroid gland.—*The Lancet.*

DYSURIA DUE TO URIC ACID.—

- R Acidi benzoici,
Sodii boratis, aa gr. v.
Aq., ʒ j.

M. Sig. At dose every two hours.
Canada Lancet.

BRONCHITIS.—

- R Codein, gr. 4.
Dil. hydrocyanic acid, gtt. 45.
Ammonium chlorid., gr. 45.
Syrup of wild cherry, fl. ʒ i ½.

Dose, teaspoonful every three or four hours.—*Amer. Med.-Surg. Bull.*

HEADACHE AND NERVOUS IRRITABILITY.—

- R Kryofin, gr. viij.
Caffeine citrate, gr. x.
Natr. bromide, gr. xv.

M. ft. in pulv. No. viij. Sig. Take one powder every two hours.—*Ex.*

SPASMODIC COUGH IN ADULTS.—

- R Bromoformi, 3 i-gr. 50.
Tinct. gelsemii, 3 2.
Syr. lactucarii, ʒ 2.
Pulv. acaciæ, q. s.

M. Sig. One teaspoonful three or four times daily.—*Med. News.*

INFANTILE DIARRHEA.—

- R Creolin, gtt. ij or iij.
Cinnamon aq., fl. ʒ iij.
Syr., fl. ʒ j.

M. Sig. A teaspoonful every hour.—*Louisville Med. Mon.*

ANTISEBORRHEIC HAIR WASH.—

- R Chioralis,
Ac. tartarici, aa i.
Ol. ricini, o.5.
Spir. vin. rect., 100.
Ess. flor. æth., 9.5.

Eichhoff, Deutsche med. Woch.

SIMPLE CONJUNCTIVITIS.—

- R Powd. boracic acid., 3 ij.
Aq., Oj.

M. Sig. Use as an eye wash three times daily.—*Prac. Med.*

THE PRESCRIPTION

Therapeutic Cullings.

RHUS AROMATICA IN INCONTINENCE OF URINE OF CHILDREN.—Dr. Ludwig Freyberger, clinical assistant to the Hospital for Sick Children, Great Ormond street, London, recommends the liquid extract of rhus aromatica in this complaint. He records thirty cases treated with gratifying results, and says that the astringent taste and disagreeable odor of the liquid extract of rhus aromatica are sufficiently disguised by syrupus aromaticus.

The dose employed was 5 to 10 minims for children two to five years old, 10 to 15 minims for children five to ten years old, and 15 to 20 minims for older children.

A very convenient formula is the following:

℞ Ext. rhois aromaticæ liq., *m* x.
Syr. aromatici, *m* xx.
Aq. destillatæ, ad 3 j.

Sig. Three times a day.—*N. Y. Med. Jour.*

TREATMENT OF GASTRIC ULCER BY LARGE DOSES OF BISMUTH.—Gastric ulcer has been treated by very many methods, some of which radically differ from one another, and the use of bismuth in this affection is by no means recent. Within the last few years, however, it has been suggested by Fleiner that good results follow the use of massive doses of this substance. This clinician employed as much as 300 to 450 grains of bismuth in suspension in water, poured into the stomach by means of a stomach tube after previous lavage, and in his paper he referred to the experiments of Mattheys upon the action of bismuth in hastening the cure of experimentally produced ulcers in the stomachs of dogs.

At a recent meeting of the Manchester Therapeutical Society, Dreschfeld read a paper upon this subject in which he protested against the use of the stomach tube as a method of administering these large doses of bismuth, on the ground that it is not wise to pass a tube into an ulcerated stomach. He stated that he had employed from thirty to fifty grains of bismuth subnitrate three times a day, suspended in water, and swallowed without the aid of a tube. Under these circumstances he found the condition rapidly relieved, vomiting ceased and digestion improved, although he allowed light nitrogenous food, such as fish or fowl, to be given. Ultimately the ulcer healed. These large doses of bismuth have never, in his experience, produced constipation, but rather a slight tendency to pain and diarrhea. Dreschfeld has also found this method useful in both acute and chronic cases, and also in acid dyspepsia with neurasthenic condition.—*Ther. Gaz.*

LOCAL ANESTHESIA.—Dobisch (*Rev. med.*) gives the following:

℞ Chloroform, gr. 150.
Sulphuric ether, gr. 225.
Menthol, gr. 15.

To be sprayed over the surface to be anesthetized. The anesthesia lasts from two to six minutes.—*N. Y. Med. Jour.*

PERTUSSIS.—

℞ Bromoform, gtt. 48.
Ol. amygdal. dulc., grm. 15.
Pulv. acaciæ, grm. 10.
Aq. laurocerasi, grm. 4.
Aq. dest., q. s. ad grm. 120.

M. Sig. For children under five years, four drops three times daily. Children from five to ten years, twenty drops daily.—*Marfan, Jour. de Med. de Paris.*

BLACK OXIDE OF COPPER IN THE TREATMENT OF TAPE-WORM.—Von Hager (cited in the *Deutsche Med. Zeitung*) mentions the following prescriptions as having been highly recommended by Filatow:

1. For adults.

- ℞ Black oxide of copper, gr. 90.
Prepared chalk, gr. 30.
Powd. white bole, gr. 180.
Glycerin, gr. 150.

M. Divide into 120 pills. For the first week two pills are to be taken four times a day; for the second week three pills four times a day. When from fifty to sixty have been taken, the bowels are to be moved with castor oil.

2. For children.

- ℞ Black oxide of copper, gr. 75.
Prepared chalk,
Magnesium carbonate,
Gum tragacanth, aa gr. 150.
Glycerin, gr. 75.
White sugar, gr. 600.

M. Divide into fifty troches. Half a troche to be given four times a day to a child under seven years old; two or three troches daily to one from eight to twelve years old.—*N. Y. Med. Jour.*

CHRONIC URETHRITIS.—In a paper on "Specific Urethritis in the Male," Dr. F. C. Taylor, of Cleveland, Ohio, says in the *Cleveland Jour. of Med.*:

"When there is a lack of tone in the canal, as is often the case in chronic urethritis, I have obtained good results from a solution each quart of which contains:

- ℞ Ext. hydrastis, gr. j.
Acid tannic, gr. ij.
Zinc sulphate, gr. vij.
Alumen,
Acid boric, aa gr. viij.

Double the strength if necessary."
Ex.

TEST PAPER FOR IODIN IN SALIVA AND URINE.—A sheet of filtering paper is dipped in a 5 per cent. solution of cooked starch. When dry it is marked off into 5 cm. squares, and in each square two or three drops of a 5 per cent. solution of ammonium sulphate are dropped and dried, sheltered from intense light. The ammonium sulphate loses its power in two or three weeks; it is best applied fresh. To test the intestinal

absorption let the subject swallow a glutoid capsule containing a little iodoform. Then mark the hour on the first square and number the rest. The subject then deposits some saliva on the corresponding square every hour and an exact record of the intestinal absorption is obtained, as the paper turns blue in contact with any traces of iodine.—*Semaine Méd.*

HYDROCHLORIC ACID IN THE TREATMENT OF SCIATICA.—Gennataz (*Union pharmaceutique*) advises painting the painful tract with from two to four coats of the pure official acid. Some tingling results, but it is quite bearable and then vesicles filled with bloody serosity appear. The part is dressed with absorbent cotton. The painting is repeated daily or every other day, care being taken to avoid applying the acid to the vesicles already produced. Usually from three to five applications are enough, but he has known the treatment to fail in a rebellious case.—*Ex.*

HYPERTROPHY OF TONSILS.—

- ℞ Iodi, gr. $\frac{3}{4}$.
Potass. iodidi, gr. $1\frac{1}{2}$.
Tinct. opii, m 15.
Glycerini, $\frac{1}{3}$.

M. Sig. Use as a paint and gargle twice daily with a solution made by adding one-half a coffee-spoonful to one-half a glass of lukewarm water.—*Moure, Pediatrics.*

ANESTHESIA OF THE MEMBRANA TYMPANI.—Dr. Bonnain (*Revue hebdomadaire de laryngologie, d'otologie et de rhinologie*) recommends the following to be applied for from three to five minutes prior to surgical intervention:

- ℞ Carbolic acid,
Hydrochloride of cocaine,
Menthol, aa gr. xxx.

M. It produces rapid anesthesia without much caustic effect.—*N. Y. Med. Jour.*

LARGE ACNE PUSTULES.—

- ℞ Ichthyol,
Bismuth subnitrate,
White precipitate, aa part j.
Vaseline, parts x.

Apply at night.—*Von Hebra and Ullman, Dom. Med. Mon.*

CATARRHAL LARYNGITIS.—Dr. Rice, in the *Post-Graduate*, gives the following formulæ, the mixtures to be used in the form of a medicated steam:

℞ Pix liquida, ʒ j.
Alcohol, 3 iv.

M. Sig. 3 j on sponge for inhalation.

Or

℞ Morphiæ sulph., gr. j.
Ext. hyoscyami, gr. v.
Glycerinæ,
Alcohol, aa 3 iv.

M. Sig. 3 ss on sponge. (In-hale.)

℞ Pulv. camphoris, 3 iij.
Menthol,
Ol. pini sylvestri, aa 3 iv.
Ol. of tar, ʒ ij.

M. Sig. Gtt. ij to x. For inhalation.

Also

℞ Thymol, gr. xv.
Eucalyptol, gr. xx.
Creasoti, 3 ij.
Ol. pini sylvestri, 3 iv.
Ol. gaultheriæ, 3 j.

M. Sig. Gtt. ij to v. For inhalation.—*The Med. Bull.*

RECTO-VAGINAL FISTULA AND RECTAL ULCERS.—“Miss W., aged 34, said the fistula had been operated on no less than six times; three times *per vaginam* and twice per rectum; but no line of union had yet been obtained. Examination revealed an opening the size of a quarter dollar, with edges ulcerated and very sensitive, causing great pain at every defecation and passing a large part of the feces into the vagina, which it was necessary to douche out on each occasion. Complicating this condition were found five points of ulceration; three anterior and two lateral. I had her put to bed, regulating secretions and putting her on bovinin treatment of a wineglassful in old port-wine every three hours; also, a teaspoonful of glycozone in water half an hour after each meal. Patient began to pick up immediately and fifteen days later, her condition being favorable, I performed the following operation: After thorough depuration of the vagina with bovinin-peroxide reaction and Thiersch irrigation, the rectum was fully dilated, the edges of the fistula were

freshened by careful dissection of margin; it was depurated with peroxide on bovinin and a tampon was inserted well up in the rectum, to prevent feces coming down on the site of operation. The vagina was thoroughly dilated in turn, the vaginal edges of fistula were freshened, as had been done at its rectal extremity and the surfaces also treated with the bovinin-peroxide reaction. I now used continuous kangaroo tendon sutures, going only through the submucous coat, but bringing the vaginal edges of the fistula into close apposition. The vagina was next cleansed with Thiersch, an iodoform-bovinin tampon was inserted and the speculum removed. The rectum was now dilated again and continuous silk sutures were employed to close up the rectal end of the fistula. The tampon, which had been previously inserted, was removed, the rectum washed out with Thiersch, and the points of ulceration were touched up with 25 per cent. pyrozone. A strip of bisterilized gauze saturated with iodoform-bovinin was gently packed in and the speculum removed.”

Abstract of a case reported from the Sound View Hospital, Stamford, Conn.

CREASOTE IN OZÆNA.—Ferrerri uses two solutions, a strong and a weak one, as follows:

Strong Solution.

℞ Creasote,
Glycerin, aa parts equal.

M.

Weak Solution.

℞ Creasote, gr. 75.
Alcohol at 70°, gr. 150.
Glycerin, gr. 600.

M. According to the severity of the complaint, he makes applications of one or the other of these solutions every day or on alternate days. When indicated, he completes the treatment by the galvano-cautery.—*N. Y. Med. Jour.*

INTERCOSTAL NEURALGIA.—

℞ Tinct. gelsemii, gtt. 100.
Syr. simp., ʒ i ½.
Aq. dest., 3 6.

Sig. Two to three drams twice or thrice daily. Do not use this prescription if the heart is feeble.—*Cheron, Med. Rec.*

DIARRHEA.—Dr. T. B. Greenley (*Jour. of the Amer. Med. Asso.*) finds the following prescription almost a specific, especially in the summer complaint of children:

℞ Paregoric, ʒ ij.
Ext. of witch hazel, ʒ j.
Carbolic acid, 3 j.
Fl. ext. of kino,
Jamaica ginger, aa 3 ij.
Precipitated chalk, ʒ j.
Simple syr., to make 3 viij.

Mix thoroughly and always shake the bottle well before dosing. For an adult a teaspoonful is a dose, to be repeated at intervals of three hours, until desired effects result. Dose for children in proportion to age.—*Ex.*

SALICYLATE OF SODIUM IN TOOTHACHE.—Dr. Frederick C. Coley believes salicylate of sodium to be the best remedy in toothache arising from catching cold. A dose of fifteen grains will usually relieve the pain promptly and if repeated every four hours the inflammation may entirely subside, leaving the carious tooth to be disposed of according to circumstances. Fifteen grains of sodium salicylate, with fifteen minims of tincture of belladonna, will often procure refreshing sleep instead of a night of agony.—*N. Y. Med. Jour.*

MENORRHAGIA.—

℞ Acidi gallici, gr. xv.
Acidi sulphurici aromat., m xv.
Tinct. cinamomi, 3 ij.
Aq. dest., ʒ ij.

M. Sig. One dose; take every four hours until bleeding ceases. (In profuse bleeding.)—*Hazard, The Atlanta Med. and Surg. Jour.*

THYMOL AS A TÆNIAFUGE.—Unna Campi (*Jour. de méd. de Paris*) has employed thymol with success against *Ankylostoma duodenale*. He recommends the following method of administration:

1. Administer in the evening, some time after the last repast, two hundred and twenty-five grains (about half an ounce) of castor oil.
2. Next morning administer first one hundred and twenty grains of broken thymol, divided into twelve doses, one to be taken every quarter of an hour.

Follow with a second dose of castor oil.

In order to combat the depressing influence of the drug, the author counsels the administration therewith of some stimulant. He asserts its curative action to be infallible.—*N. Y. Med. Jour.*

PRURITUS ANI.—This distressing trouble may, we are told by *La Presse Medicale* through the medium of the *Age*, be relieved by the following:

℞ Powd. camphor, gr. xxx.
Oxide of zinc,
Bismuth,
Talc, aa ʒ j.

This powder is applied by means of absorbent cotton, the part which itches having been first painted by a 25 per cent. solution of nitrate of silver, after which a suppository of cacao butter and extract of belladonna may be used.—*Kansas City Med. Ind.*

TOOTHACHE.—

℞ Cocain hydrochlorat., gr. 2.
Camphoræ,
Chloralis hydrat., aa gr. 80.

M. Add a few drops of water and triturate until the mixture becomes a clear, homogeneous liquid. Sig. External use. Apply on a bit of absorbent cotton introduced into the dental cavity, renewing the application until the pain ceases.—*The Med. Stand.*

OVARIAN PAINS.—Dr. Talley frequently calls attention to the value of gelsemium for the relief of ovarian pains which are due to no apparent change in the position or structure of the ovary.

The fluid extract is the preferable preparation and is best given in doses of from one to two drops, combined with a drachm of the fluid extract of viburnum prunifolium, this dose to be repeated four times daily.
Ex.

MIGRAINE.—The following formula emanates from A. Robin:

℞ Antipyrine,
Potassium bromide, aa gr. 8.
Cocaine hydrochlorate, gr. 1-6.
Caffeine, gr. ⅓.
Powd. paulinia sorbilis, gr. 4½.

Le Progres Med.

SEDATIVE IN THE FIRST STAGE OF LABOR.—When indicated, the following will be found useful as a sedative in the first stage of labor:

℞ Hydrate of chloral,
Bromide of sodium,
Bromide of ammonium, aa 3
iiss.

Syr. simp., ʒ ss.

Aq. dest., q. s. ad ʒ ij.

M. Sig. One dram every hour until three doses are taken.—*Hare, College and Clinical Record.*

DISEASES OF THE UPPER AIR-PASSAGES.—A very large percentage of the diseases of the upper air-passages are incited by adenoids and while this condition is perhaps often secondary to nasal obstruction, it is, nevertheless, manifest that this inflammatory condition will not subside even when the nasal obstruction is removed. Therefore the removal of post-nasal growths is imperative; not only growths but adenoid hypertrophies should be just as surely and as thoroughly removed, and this operation requires a thorough knowledge of the anatomic relation, and skill in the use of the instruments designed for the removal of this hypertrophic tissue, growths, etc. Hypertrophied tonsils should be removed by the amygdalotome, and to be successful must be thorough, so that no fragments protrude beyond the pillars of the soft palate.

Of the diseases affecting this region due to a constitutional condition might be mentioned, first, atrophic rhinitis. A very large percentage of the patients afflicted with this disease succumb to tuberculosis sooner or later, and of those who do not, their prolongation of life may be attributed to favorable hygienic and sanitary environments; also to faithful and careful cleansing of the parts and keeping the physiologic action of the nose in as perfect a condition as possible. The best method of doing this is the daily use of the syringe with pure hot water. Not only is this plan of treatment beneficial in removing putrid secretion, but the warmth, irrigation and massage have an influence in equalizing the circulation and restoring the lost nerve power. As a means of giving rest to these overwrought, worn and ex-

hausted parts, after such cleansing, it is desirable to find some remedy that will physiologically put the parts in splints. This I believe I have found in the following prescription:

℞ Powd. thiol, gr. x.

Menthol, gr. v.

Liquid blancolin (paraffin liquid), ʒ j.

M. Sig. Apply three or four times a day by means of an oil atomizer.

This proves of still greater benefit if it can be used as hot as possible, consistent with the comfort of the patient.

I was led to make a trial of thiol because of the good results I had obtained in some forms of skin diseases I had treated with this remedy, and I had also found it beneficial as an air-tight dressing in fresh wounds. The foregoing prescription I am using with very satisfactory results after operations within the nasal lumen.—*Armstrong, N. Y. Med. Jour.*

VOMITING OF PREGNANCY.—

℞ Ingluvin, gr. 40.

Cerei, gr. 10.

Pulveris ipecacuanhæ, gr. 5.

Creosoti, m 5.

M. et div. in chart. No. 10. Sig. One powder taken every hour until nausea is controlled.—*The Atlanta Med. and Surg. Jour.*

PAIN OF LITHIASIS.—In lithiasis of the bladder or cystic duct the pain is sharply located in the right hypochondrium; jaundice is usually absent and when present is usually due to suppuration or to location of the stone near the junction of the common and cystic ducts; a tumor is usually present.—*Cowan, Med. Rec.*

ANTIPYRINE IN FATTY DIABETES.—Lemoine (*Nord Médical; Revue du praticien*) recommends antipyrine as the essential drug in the early stage of fatty diabetes of Lancereaux. The maximum dose of 45 grains in a day should not be exceeded, and ordinarily the daily amount taken should not pass 22½ to 30 grains in cachets, each containing:

℞ Antipyrine, gr. xij to xv.

Bicarbonate of sodium, viiss to xij.

N. Y. Med. Jour.

MOUTH-WASHES FOR SICK CHILDREN.—

℞ Acid tartarici, 3.o.
Aq. destillati, 180.o.
Aq. menth. pip., 20.

M. Sig. Mouth-wash.

℞ Acidi tartarici, 3.o.
Aq. destillati, 200.
Menthol, 1.o.

M. Sig. Mouth-wash.—*Monti, Pediatrics.*

KNOCK-OUT DROPS.—Knock-out drops, says an exchange, is the name used to describe some secret narcotic which is put in the drink of inebriates to make them insensible, for the purposes of robbery. This is found to be always chloral, in concentrated solution, sixty grains to a drachm. This can be readily disguised and put in spirits without detection, the drinker always having palsied taste. This drug cannot be detected and is more readily soluble in spirits. One hundred grains can be dissolved in a drachm. Enough of this is absorbed to produce narcosis quickly without the usual stage of extreme excitement.—*The Med. Age.*

VOMITING OF PREGNANCY.—Dr. Luther Sexton, of New Orleans, recommends in the *Virginia Med. Semi-Monthly*:

℞ Cocaine hydrochlorate, gr. j.
Bismuth subnit., 3 iv.
Milk magnesia,
Aq. lauro cerosi,
Aq. cinnamoni, aa ʒ ij.

M. Sig. Two teaspoonfuls every hour or two apart.—*The Med. Bull.*

CHILBLAINS.—C. Binz (*Fortschritte der Medicin*) thinks that only chemicals capable of penetrating the epidermis can be expected to have any effect upon chilblains. To these belong chlorine in the form of chlorinated lime. He has found that one part of this, mixed with nine parts of paraffin ointment, rubbed into the inflamed parts for five minutes every night, will cause the pain and swelling to disappear in the course of a week. After each inunction the foot is covered with a very thick bandage. It is important that the ointment should have a strong odor of chlorine, and he points out that the chlorinated lime of shops has

generally parted with its free chlorine. Another point of importance is that the drug should be mixed only with paraffin ointment; for Binz has found that, when mixed with lard and especially with lanolin, it gives up its chlorine too quickly. The ointment is useful only so long as it gives out a decided smell of chlorine. *Indian Lancet.*

DEATH TO CORNS.—

℞ Ext. of cannabis indica, part 1.
Salicylic acid, parts 10.
Ol. of turpentine, parts 5.
Glacial acetic acid,
Cocaine (alkaloidal), aa parts 2.
Collodion, q. s. ad parts 100.

M. Apply a thin coating every night, putting each coating on top of the preceding one, until finally the whole drops off, bringing the indurated portion and frequently the whole corn with it.—*National Druggist.*

DIAPHORETIC POWDER.—According to the *Gazzetta degli ospedali e delle cliniche*, von Graefe recommends the following:

℞ Powd. camphor, gr. $\frac{3}{10}$ —1½.
Powd. opium, gr. $\frac{1}{3}$ —½.
Acetate of potassium, gr. 3—4½.
Sugar, gr. 150.

M. To form one powder, which is put into a cup of tea and taken at bedtime.—*N. Y. Med. Jour.*

VAGINAL INJECTION.—Dr. Chas. A. Hoff, Southern Ohio Hospital for the Insane, says: "Listerine has no equal as a general vaginal injection, being entirely safe, cooling, unirritating, healing and uniformly successful in removing disagreeable and offensive odors. One to two ounces in a quart of warm water is generally sufficient for vaginal douche or injection."—*Med. Rev. of Rev.*

JACCOUD'S NUTRITIVE ENEMA.—The *Jour. de med. de Paris* gives the formula as follows:

℞ Yolks of two eggs.
Dry peptone, gr. 60—300.
Wine, gr. 1,800.
Bouillon, gr. 3,750.

M. It is recommended for use in cases of cancer of the stomach with obliteration of either the cardiac or the pyloric orifice.—*N. Y. Med. Jour.*

INTESTINAL ANTISEPSIS.—

℞ Alpha-naphtholi, 4.
Phenacetini, 1-2.

M. ft. pulv. div. in part æq. No. v.
Sig. One powder every three to four hours.

Or:

℞ Alpha-naphtholi, 2.
Olei ricini, 30.
Olei menthæ piper., gtt. 1.

M. Sig. To be taken in two doses at an interval of one hour.—*Maximovitch, Med. Rec.*

ANTIPYRIN IN SCIATICA.—Dr. Kuhn (*Allg. med. Cent.-Zeitung*) recommends hypodermic injections of antipyrin. By means of a Pravaz syringe he injects several times daily a 50 per cent. aqueous solution. The liquid must reach the affected nerve in order to be efficacious; the needle is inserted a little below the middle of a line drawn from the tuber ischii to the great trochanter.—*Med. Rec.*

PRURITUS ANI.—*Le Progrès Méd.* attributes the appended formula to Penzoldt:

℞ Sodium hyposulphite, gr. 4½.
Carbolic acid, 3 i¼.
Glycerin, 3 5.
Distilled aq., 3 i4.

M. Sig. For external use. Apply frequently upon saturated compresses.—*Ex.*

NEW HEMOSTATIC.—The *Comelina tuberosa* was prized by the Aztecs for its remarkable hemostatic properties and the Mexican physicians have recently rescued it from the oblivion of ages. They find that it arrests epistaxis immediately, even in severe cases of traumatism, purpura hemorrhagica, etc. — *Jour. Amer. Med. Asso.*

COMPOUND TINCTURE OF BENZOIN IN ENTERIC FEVER.—Dr. James C. Potter, of Spennymoor, Durham, writes to the *Brit. Med. Jour.* as follows:

Lately I have had under my care several cases of enteric fever with excessive diarrhea. I have in these cases tried a mixture of compound tincture of benzoin and water with marked success. I start by giving a dose of five minims of the tincture every two hours, and if the diarrhea

does not decrease in twelve hours, I then double the dose. In all the cases after twenty-four hours' administration I have found marked benefit; the diarrhea decreases, the stools are not so offensive, the temperature is decidedly lowered and the patient feels very much more comfortable. I attribute the success in these cases to:

1. The internal antiseptic property of the drug.
2. The mixture forming a protecting coat to the inflamed bowel.
3. The antipyretic action of the drug.—*Ex.*

MODIFIED DOBELL'S SOLUTION.—

℞ Sodii boratis,
Sodii bicarbonatis, aa 3 2.
Glycerini, m 200.
Acidi carbolic liquefacti, m 50.
Aq. calidæ, 3 i6.

The original calls for the glycerite of carbolic acid of the British Pharmacopœia.—*Med. Rec.*

DERMATOLOGICAL EXCERPTS FROM THE CASE BOOK OF A GENERAL PRACTITIONER.—The following cases are such as the general practitioner meets in the regular routine of his practice, but which are usually referred to the specialist, not in consequence of his inability to cope with the malady, but chiefly because these diseases do not yield as readily and rapidly to the treatment of the family physician as the patient expects. The following cases are not only interesting for the therapeutic measures employed, but from the unique resolution of the pathological lesions.

STEATOMA SEBACEOUS CYST.

CASE I. Mrs. W—, age 67, Scotch, widow. Complained of pain over bladder, constant desire to pass urine, but could only void a few drops at a time, pain extending to the perineum and down the thighs, increased by abdominal pressure, decided constitutional debility and mental depression, rheumatic diathesis.

Diagnosis.—Cystitis. This was the complaint for which she sought medical advice, though she expressed great anxiety "to get rid of those ugly lumps on the top of head," incidentally remarking that two years previous she had three *wens* removed from her head at Roosevelt Hospital

but as they bled so severely the surgeon decided not to remove the remaining three until another time. Some weeks thereafter, however, she had the balance removed and for two years has been free from these lesions. Last spring, however, they again made their appearance, this time in increased numbers, and continually growing larger. Upon examination the tumors were found to be semiglobular, of firm consistency, movable on manipulation, painless and eight in number, varying in size and form from a lima bean to a large malaga grape.

Diagnosis.—Sebaceous cysts. Previous history and present examination leave no doubt as to steatoma being the correct diagnosis.

Treatment.—The cystitis being successfully alleviated, attention was directed to the tumors, and owing to the debilitated condition of the patient, together with the previous history of inflammatory and hemorrhagic tendency, it was deemed advisable to omit surgical interference, but to try the topical application of thuja occidentalis fl. ext. three times daily, and at the same time directed attention to the constitutional symptoms by administering:

R Nux vomica, gr. 1-10.

Arsenious acid, gr. 1-50.

After each meal, together with "panopecton," a wineglassful four times daily, restricting diet to easily digested food, prohibiting coffee and tea, but permitting milk and lime water and egg-nog *ad libitum*.

The patient was not seen until eight weeks had elapsed and as she remarked, "she thought it was not necessary to call, inasmuch as she had progressed so splendidly," the wens gradually disappearing until but a slight glossy pink elevation remained to show their former location. Empirical therapeutics seemed to succeed in this instance.

FURUNCULOSIS.

CASE II. Carl B., age 29, German, single, clerk, family history, good; personal history, sedentary habits, habitual constipation, given to the practice of Onanism; never had any venereal disease, pale, anemic, general asthenia, pulse 85 and regular, temperature 99°; microscopical examination of blood showed but half

normal quantity of red blood corpuscles, and but 40 per cent. of hemoglobin; has hard, raised and painful swellings all over his body of varying sizes from a pea to a cherry, in various stages of suppuration, some opening and discharging pus; a general succession of boils; one crop would disappear and another come with regular recurrence, especially on the face, neck, back and extremities.

Diagnosis.—Anemia and furunculosis.

Treatment.—For the anemia.

R Arseniate of iron,

Arseniate of quinine, aa gr. ¼.

After each meal, and a wineglassful of "hemaboloids" every two hours. Diet restricted to chopped meat, toast, eggs and buttermilk. For the constipation, cascara sagrada, fl. ext., one dram every night and for the boils, calcium sulphide, 1-6 gr. every three hours.

At the end of one week there was marked improvement; and after three weeks all boils having disappeared the case was discharged, greatly improved, with instructions to take:

R Quassia, gr. ¼.

Strychnine arseniate, gr. 1/16.

Before each meal; and a wineglassful of bovine t. i. d., with the auxiliary of exercise, cold bath before retiring, etc.

Returned for inspection after two months and found to be completely recovered.

CHRONIC ULCER.

CASE III. M. S., age 37, English, coachman, excessive drinker, past history of Bright's disease; has had ulcers on the outer side of left foot and leg for the past five years, and been under medical treatment for past four years. He was brought to me by his attending physician, March 10th. Examination revealed an ulcer on the foot extending over an area of 2x3 inches, and one on the leg the size of a silver dollar; both presenting a gray, ragged, sloughing surface, edges indurated and surrounding skin red and cedematous, granulations on wound unhealthy and of a greenish color.

Diagnosis.—Indolent ulcer; condition aggravated by his intemperance.

Treatment.—The limb having been thoroughly scrubbed with warm

water and ethereal antiseptic soap solution (Johnston's P. D. & Co.'s), the edges of the ulcers trimmed and all deciduous tissue cut away, the whole wound was gently curetted, the surface touched up with 25 per cent. pyrozone and dressed with gauze wet with ext. hydrastis fl. The following morning the dressing was removed and the wound thoroughly cleansed with bichloride of mercury solution (1-2000) and sprayed with a solution of equal parts of bovine and peroxide of hydrogen, dressed with gauze saturated in pure bovine to which one-third part of fluid extract of hydrastis was added. Internal medication consisted of the administration of:

℞ Calomel, gr. j.

Soda bicarb., gr. v.

Every hour until effect. Proto-nuclein powder, five grains one hour before each meal. Phosphate of soda, one dram in a tumblerful of hot water every morning. Diet, simple and nourishing: for thirst, Vichy and Lithia water.

The local dressings were continued daily for two weeks (first spraying the wound with equal parts of peroxide of hydrogen and bovine; then dressed with gauze saturated with a solution of bovine, two parts; fl. ext. hydrastis, one part; covered with oiled silk, and a snug roller bandage applied) then every second day until healing was completed. Healthy granulations appeared on the eighth day and healing was complete April 7th, twenty-seven days after the beginning of treatment—a very brief period for an ulcer of such a character.

This treatment of chronic ulcer I have termed "liquid skin-grafting," although appreciating its inaccuracy and yet it was naturally suggested by the rapidity with which a layer of epithelium was produced in this case.—*Gottlieb, Med. Rev. of Rev.*

ANTITUBERCULOUS OIL.—The *Cronica Medica* recommends the following:

℞ Vegetable creosote, m 150.

Naphthol, m 45.

Metallic iodine, gr. 2¼.

Cod liver oil, 3 6.

M. A tablespoonful three times a day.—*N. Y. Med. Jour.*

RHINITIS.—

℞ Guaiacol, 3 2.

Menthol, gr. 40.

Cocaine hydrochlorate,

Camphor, aa gr. 20.

Glymol, 3 4.

M. Sig. Use in atomizer, spraying nose and throat every three hours.—*Purkitt, Ther. Gaz.*

INFANTILE DIARRHEA.—Symes in the *Dublin Jour. of Med. (Ther. Gaz.)* suggests the following prescription for a child of three months, as a sedative in cases of infantile diarrhea:

℞ Tinct. opii camphoratæ, m j.

Glycerine acidi carbolici, m ij.

Ol. ricini, m v.

Mucilaginis acacæ, m xv.

Aq. menthæ piperitæ, q. s. 3 j.

This to be given every four hours.

Symes insists in the treatment of this disease that rest, washing of the mouth with glycerine, or borax, or diluted peroxide of hydrogen in the strength of 2 per cent., removing of irritating particles from the bowels by a dose of castor oil. He suggests the following prescription for unloading the bowels when there is no great hurry:

℞ Ol. ricini, m v.

Mucilaginis acaciæ, m xv.

Aq. menth. pip., q. s. 3 j.

This to be given every hour until the bowels move.—*The Med. Fortnightly.*

TOOTH POWDER.—

℞ Cretæ præp.,

Iridis florent, pulv., aa 3 j.

Oss. sepiæ, pulv., 3 ss.

Ol. limonis, or ol. gaultheriæ,
or ol. rosæ, q. s. for flavoring
and odor.

M.—*Louisville Med. Mon.*

CATARRHAL JAUNDICE.—

℞ Ammonii iodidi, 3 j.

Liq. potassii arsenitis, 3 ss.

Tinct. calumbæ, 3 iv.

Aq. destil., 3 iss.

M. Sig. Teaspoonful before meals. *Bartholow, The Atlanta Med. and Surg. Jour.*

ALTERATIVE AND TONIC.—

℞ Syr. ferri iodidi, 3 iv.

Syr. roborans, q. s. fl. 3 viij.

M. fl. mist. Sig. A teaspoonful three times daily.—*Ex.*

CORYZA.—The following is culled from the *Jour. des Practiciens*:
Snuff.

- ℞ Bismuth subnitrate, 3 i.
Powd. camphor, gr. 6.
Powd. boric acid, gr. 3.
Morphine hydrochlorate, gr. $\frac{1}{2}$.
Cocaine hydrochlorate, gr. $\frac{1}{4}$.
Powd. benzoin, gr. 15.

The following prescription may be used internally:

Mixture.

- ℞ Ext. hyoscyamus, gr. x.
Potassium iodide, 3 j.
Potassium bicarbonate, 3 ij.
Ext. licorice, 3 j.
Anise-water, fl. ʒ iiiss.

Dessertspoonful every four hours.
Am. M. S. Bull.

PHENOMENA PRODUCED BY WORMS.
M. Chauson in a communication to the *Société Médico-Chirurgicale*, said that it seems probable that a large number of the accidents produced by parasites of the alimentary canal are of a nature other than merely reflex. M. Chauson says that he has himself seen persons who handled worms in the laboratory become subjects of various eruptions—of conjunctivitis, coryza, abnormal secretions of the nose and ears, pharyngitis, aphonia, etc. These phenomena he considers as manifestly produced, sometimes by an irritating vapor emitted from the bodies of the animals when cut into pieces, sometimes by direct contact of the worm juices with the parts-attacked. He further calls attention to the eruption which not infrequently attends the puncture of hydatid cysts. Less known accidents, but of such a nature as to cause great inquietude to the assistants, are quoted by M. Huchard as attendant upon the simple puncture of a hydatid cyst. M. Chavffard quotes a case of rapid death by asphyxia accompanied with eruption and convulsions, and taking place in twenty minutes after the puncture. From these facts the author concludes that in certain undetermined conditions, the juices of human parasites—notably hydatids and ascarides—when absorbed into the system, may produce by their inherent toxicity accidents often serious and even occasionally fatal. M.

Jocqs quoted a case of xanthopsia and impairment of vision in a child where a dose of santonin, by bringing away several worms, effected a prompt cure of those symptoms which he deemed toxic, not merely reflex. M. Henocque pointed out that oxyurides more frequently caused nervous symptoms than ascarides. Several other speakers related cases, most of which tended to support M. Chauson's views as to the toxic character of worm symptoms.—*N. Y. Med. Jour.*

LOCOMOTOR ATAXIA.—In the *Penn. Med. Jour.*, Dr. F. Savary Pearce, of Philadelphia, says:

"The use of a stimulating liniment rubbed well over the surface of the body has proved also of great value in hastening circulation, so deficient in this class of patients. The following prescription has done well in our hands:

- ℞ Ammonii chloridi, 3 iij.
Glycerini, fl. ʒ j.
Tinct. capsici, fl. ʒ ss.
Aq. menthæ piperitæ, q. s. ad fl. ʒ xij.

Sig. Rub well into limbs daily, with massage."—*The Med. Bull.*

DIARRHEA.—

- ℞ Tinct. opium,
Tinct. rhubarb, aa ʒ ss.
Comp. tinct. catechu, ʒ j.
Ol. sassafras, m xx.
Comp. tinct. lavender, q. s. ad ʒ iv.

M. Sig. One teaspoonful every four hours for adults.—*Loomis, Med. Rec.*

BRONCHITIS.—For slight bronchitis among the soldiers at Chickamauga, Dr. Edward Martin says in the *Ther. Gaz.*, that he found the following effectual:

- ℞ Terebene,
Ol. of eucalyptus, aa 3 j.
Syr. of yerba santa, ʒ j.

M. Sig. One teaspoonful every two or three hours.—*The Med. Bull.*

PERSISTENT NIGHT COUGH.—

- ℞ Fl. ext. ergot, 3 j.
Glycerin, 3 iij.
Aq. dist., q. s. ad 3 j.

Sig. Teaspoonful at night.—*Rixa, The Med. Sum.*

MALARIA.—Dr. Robert S. McGeachy, of Raleigh, N. C., has found his method of treatment in malarial fevers very successful, after using it in a large number of cases, and he details the method in the *Charlotte Med. Jour.* as follows:

On being called to see a patient who has been having chills, if he is suffering from severe headache, backache and pain in the limbs, I prescribe:

℞ Caffein cit., gr. j.
Sodii bicarb., gr. vj.
Acetanilid, ʒj.

M. et ft. cap. No. iv. Sig. One every two hours until relieved.

I never order more than four of these capsules, for they seldom have to take that many before relief is obtained and if that number does not give relief it is useless to continue them. If calomel is indicated I order the following:

℞ Calomel,
Sodii bicarb., aa gr. vj.

M. et ft. cap. No. j. Sig. Take at bedtime. Then give:

℞ Quinine sulph., ʒj.

Div. in cap. No. xij. One 6, 8, 10 and 12 o'clock A. M. until all are taken.

After having taken the above, give the following as a tonic:

℞ Liq. potass. arsen., 3 iss.
Quinine sulph., gr. xvj.
Tinct. ferri chlor., 3 ij.
Glycerin, ʒ ss.
Aq., q. s. ad ʒ ij.

M. Sig. One drachm three times a day after meals.

If the case has not been a severe one, two ounces of tonic is sufficient; if severe, I order three or four ounces according to indications.—*The Med. Summary.*

TINEA TONSURANS.—Dr. Herman B. Sheffield, in the *N. Y. Med. Jour.*, recommends:

℞ Acidi carbol.,
Ol. ricini, aa 110.0.
Tinct. iodini,
Ol. petrolei, aa 65.0.
Ol. rusci (German), q. s. ad 500.0.

The hair is clipped close and the mixture thickly applied by means of a paint brush once every day for five successive days. On the sixth day the application is to be wiped off

with a rag dipped in olive oil, the hair clipped again, and the scalp washed thoroughly with green soap and a soft nail brush. This process is to be repeated regularly for three or four weeks and it is to be then followed by the application of a 10 per cent. sulphur ointment for a few days. Finally, the following lotion is to be used for two weeks:

℞ Resorcin,
Acid. salicylic, aa 16.
Alcohol, 120.
Ol. ricini, q. s. ad 500.

The Med. Bull.

GENERAL SEPTIC PERITONITIS.—A. J. McCosh states that the use of sulphate of magnesia—one to two ounces in saturated aqueous solution injected into the small intestine during laparotomy for general septic peritonitis—is a valuable addition to the usual methods he has employed. The steps of his technique are as follows:

1. Chloroform narcosis.
2. A free incision—five to six inches.
3. Usually evisceration.
4. Removal of the cause of peritonitis.
5. Irrigation with salt solution at 110° to 112° F.
6. Sulphate of magnesia solution injected into the small intestine.
7. Drainage.
8. Partial closure of wound.

As to after treatment, he gives ten grains of calomel supplemented by rectal stimulation.—*Annals of Surg.*

ATROPINE IN DELIRIUM TREMENS.—Touville (*Vratch; Archives médicales belgiques; Gazzetta medica Lombarda*) starting from the standpoint, based upon the researches of Mendel and Krukemberg, that in delirium tremens certain regions of the brain are in a state of depression, has tried various medicaments with a view to counterbalance and dispel the cerebral depression.

He administered atropine to eleven alcoholics affected with delirium tremens, of whom five had the furious and six the calm type. In ten cases the patients became quiet shortly after a single injection and fifteen minutes later were asleep. The dose

employed was one milligramme (about one-sixtieth of a grain) of sulphate of atropine subcutaneously. In one case alone, notwithstanding the administration of a larger dose of one milligramme and a half, the patient continued very restless. The injection was made in this case in the evening; in the morning, after a cold affusion, the patient became calm. The following night he slept well.

Further, Touvime resorted to injection of atropine in a case of post-typhoid psychosis in a non-alcoholic. Two injections daily were given—namely, morning and evening—the dose being again one milligramme. The patient was completely cured in five days.—*N. Y. Med. Jour.*

INCONTINENCE OF URINE.—

℞ Syr. belladonnæ,
Syr. tolutani, aa 60.0.

M. Sig. Take a coffeespoonful morning and night.

Or:

℞ Ferri carbon., 0.03–0.10.
Ext. belladonnæ,
Ext. nucis vom., aa 0.01–0.05.

M. ft. pulv. talcs No. 1 (1). Sig. Begin with one powder daily and gradually increase the dose until the physiological effect of the belladonnæ is obtained.—*Centrāl. f. d. Gesam. Therapie.*

DIAGNOSIS OF CANCER OF THE BREAST.—

1. Classical signs of cancer: *a.* Adherence of tumor to skin and deep parts. *b.* Retraction of the nipple. *c.* Hardness of the tumor. *d.* Early involvement of axillary glands.

2. In certain cancers of the breast these are not always all present.

3. Chronic mastitis and cancer of the breast. *a.* Hard to distinguish from beginning cancers. *b.* Usually occurs during pregnancy or after parturition, this not common with cancer. *c.* Edematous condition not seen in cancer, in which tumor does not keep imprint of finger on only to a small extent. *d.* After retraction of nipple, but in a regular manner, surrounded by a circular ridge of skin which, if pulled out, will allow the nipple to stand out—this is not the case in cancer. *e.* Pain severe and attacks more frequent, while in

cancer there may be no pain as long as there is absence of ulceration. *f.* Improves under the influence of rest and pressure.

4. Tuberculous lesions of breast and cancer. *a.* Generally co-exists a regular pulmonary tuberculosis. *b.* Temperature changes suggesting tuberculosis. *c.* As in all tuberculous lesions we see after a while symptoms of local inflammation, often ending in fluctuation through the formation of more or less cheesy pus.

5. With all these rules for diagnosis we still are sometimes rather in the dark; in such cases our duty is very clear—operate at once!—*The International Jour. of Surg.*

THERAPEUTIC HINTS.—Tincture myrrh and capsicum compound in twice the quantity of glycerine and water to dilute it according to the age and strength of the patient and the severity of the case, will cure almost any case of diphtheria. It should be thoroughly sprayed into the throat as frequently as the case requires, night and day. Use a milk diet and keep the patient at an even temperature.

Oil pennyroyal or oil sassafras, well cut with alcohol, about five times the quantity and applied to the skin more or less dilute about twice during the night, will nicely keep off the mosquitoes.

Use sanmetto in gonorrhea if you want a good compound and a permanent tonic.—*Sanative Medicine.*

SWEATING HANDS.—The *Revue méd.* cites the following as being quoted by *Nouveaux remèdes* from a German source. It is said to have given excellent results:

℞ Borax,
Salicylic acid, aa gr. 225.
Boric acid, gr. 75.
Glycerin,
Dilute alcohol, aa m 900.

M. Rub in three times daily.—*N. Y. Med. Jour.*

VAGINAL DOUCHE.—Dr. Byron Robinson, of Chicago, gives the following directions for a vaginal douche:

1. Use a fountain syringe holding three gallons of water with a four foot head.

2. Begin with (married women) three quarts of boiled water at 103.

3. Increase the heat one degree at each sitting until it is as hot as can be borne.

4. Increase the amount of the douche one pint each time until three gallons are taken.

5. Use the douche in the morning and in the evening when retiring.

6. The duration of a three gallon douche should be 25 minutes.

7. The patient should lie on the back with the thighs flexed on the abdomen and the legs flexed on the thighs.

8. The douche should be taken on a level plane, the ironing board serving a good purpose, and not in the bed, on the water closet or in the bath-tub.

9. The douche should never be taken in the standing or sitting posture.

10. A handful of salt (NaCl) and a teaspoonful of alum may be added to every gallon, the salt to prevent reaction and the alum to astringe and check waste by secretion.

11. The vaginal tube used in giving the douche should be sterilized and every patient should have her own tube.

12. A vaginal douche given according to the above directions will prove to be of much therapeutic value in the treatment of pelvic disease, an agent to prevent disease and a great comfort to the patient.—*Med. Rev.*

LOCAL ANESTHETICS.—Dr. Lawrence Turnbull, of Philadelphia, says that "the combination of the two local anesthetics has been found very satisfactory, viz.:

℞ Cocaine hydrochlorate,
Eucaine hydrochlorate, aa gr. iij.

Distilled aq., fl. 3 v.

Use for local application, or for hypodermic injection from five to ten drops.

Solution to be boiled.

The dose and concentration of solution should be about the same as that of cocaine, but eucaine is a little more stable. It can be sterilized without injuring its anesthetic properties. The pulse with eucaine is always decreased in frequency; with

cocaine there is primary acceleration. It can be used in the form of an ointment in the ear and nose in the same proportion as cocaine for the relief of pain before operation. In acute uvulitis, tonsillitis and pharyngitis a solution of from 10 to 15 per cent. in alcohol may be painted over the part, which will relieve the pain, swelling of the inflamed surface, and often do away with the necessity of surgical aid. When an operation is required for the removal of the uvula or tonsils, it will be found a valuable local anesthetic. The value of the use of eucaine in the extraction of diseased teeth, etc., I can confirm by original observations in its favor in 1896."—*The Med. Bull.*

WHOOPING-COUGH.—

℞ Bromoform, gtt. 48.
Ol. amygd. dulc., 20.
Gummi tragacanth, 2.
Gummi arabici,
Aq. laurocerasi, aa 4.
Aq. destill., 12.

M. One-half teaspoonful of this mixture contains about two drops of bromoform. Give two or four drops in divided doses daily; increase to eight or more.—*Radiaz, Med. Rec.*

COLLODION IN THE TREATMENT OF PRURITUS ANALIS AND HEMORRHOIDS. According to Samways, painting the anus with collodion will cure the pruritus completely in twelve to fourteen hours and also tend to reduce the size of external hemorrhoids if applied on a tampon. The one disadvantage is a sharp burning sensation for a moment, which can be obviated by painting with cocaine beforehand.—*Jour. Amer. Med. Asso.*

PILULES FOR URTICARIA.—Gueneau de Mussy (*Four. de méd. de Paris*) recommends the following:

℞ Pulv. jaborandi,
Ext. of guaiacum, aa gr. iss.
Benzoate of lithium, gr. iij.

for each pilule. Two to be taken in the 24 hours. The dose may be increased subsequently to four in the 24 hours. This treatment especially applies to arthritic subjects attacked with chronic urticaria, and is recommended concurrently with the use of sulpho-arsenical waters.—*N. Y. Med. Jour.*

NERVOUS VOMITING.—Meisl (*Ther. Woch.; Pacific Record of Med. and Surg.*) recommends the following for nervous vomiting produced by disturbances of the nervous system without external irritation or anatomical lesion:

℞ Menthol, gr. 1.

Sodium bicarbonate, gr. 100.

Dispense in ten capsules. One capsule to be taken three times a day. In severe cases suppositories of one-third of a grain of extract of belladonna and a half a grain of codeine are recommended in addition.—*N. Y. Med. Jour.*

INTESTINAL ANTISEPTIC MIXTURE. The following formula is advised by de Maximovitch (*N. Y. Med. Jour.*):

℞ Naphthol, gr. 45.

Chloroform, gtt. 15.

Castor ol., gr. 1,500.

Ess. peppermint, gtt. 5.

Dose, a tablespoonful (for children a teaspoonful) in port wine, beer or hot and sweetened black coffee.—*The Med. Standard.*

ANTISEPTIC POWDER FOR SUPPURATING SURFACES.—The *hebdomadaire de méd. et de chir.* gives the following as Schwartz's formula:

℞ Powd. iodoform,

Powd. salol,

Bismuth subnitrate,

Powd. charcoal,

Powd. cinchona,

Powd. benzoin, aa equal parts.

M.—*N. Y. Med. Jour.*

INFLUENZA.—Bacelli (*Centralblatt für innere Medicin*) recommends the following formula for use in cases that begin with severe fever and nervous symptoms:

℞ Quinine salicylate, gr. 3.

Phenacetine, gr. $2\frac{1}{4}$.

Camphor, gr. $\frac{1}{3}$.

M. As many as six such powders may be given in twenty-four hours. When catarrhal symptoms appear, from a third of a grain to half a grain of antimony pentasulphide may be added.—*N. Y. Med. Jour.*

INDICATIONS FOR VENESECTION.—

1. In affections of the central nervous system, such as cerebra hyperemia, apoplexia cerebri, inflammation of the cerebral membranes.

2. Kidney diseases in the stages of edema and uremia (Saccharjin and Hoffman).

3. Cardiac disease of valvular origin. In great disturbances of circulation in which the venous system is overtaxed and the arterial pressure raised (Liebermeister).

4. In pneumonias with an exceptionally severe onset, absolutely in the first stage.

5. In various stages of chlorosis (Dyes, Wilhelmj).—*Kacsar, Wiener klinische Rundschau; Med. Rec.*

TREATMENT OF GOUT BY LYCETOL. Hoven (*Gaz. des Hôpitaux*) gives the following:

℞ Calcined magnesia, gr. xxss.

Lycetol, gr. xv.

M. Dissolve in eight ounces of water and take half after the mid-day and the other half after the evening meal.—*N. Y. Med. Jour.*

ANTHELMINTIC.—

℞ Acidi salicylici, 0.5.

Ext. filic. maris æther, 0.75.

Gummi arabici, 7.5.

Syr. simplicis, 50.

Ol. cinnamomi, gtt. 10.

Aq. destil., 100.

M. Sig. To be taken before breakfast.—*Guida, Med. Rec.*

ACUTE NEPHRITIS.—

℞ Diuretin, gr. 80.

Syr. simplicis, 3 5.

Aq. destillatæ, 3 5.

M. Sig. One tablespoonful every two hours.—*Steiner, Med. Rec.*

ACUTE COLIC.—The *North Amer. Pract.* recommends the following for acute colic due to indiscretions in diet:

℞ Chloroform, 3 iss.

Deodorated tinct. of opium, 3 j.

Camphor, gr. iv.

Ol. cajuput, 3 j.

Aq., 3 ij.

M. One teaspoonful to be taken every hour or two.—*N. Y. Med. Jour.*

BRONCHIECTASIS.—

℞ Terpinol, m xxx.

Ol. olivæ, 3 iss.

Div. in caps. No. 20. Sig. One capsule every two hours.—*Rabow, The Med. Stand.*

THE PRESCRIPTION

Therapeutic Cullings.

ECZEMA OF THE EXTERNAL AUDITORY CANAL.—

R Acid. phos. dil., 3 iv.
Tinct. ferri perchlor., $\frac{3}{4}$ ij.
Syr. limonis, $\frac{3}{4}$ iij.

M. Sig. Teaspoonful in wine-glass of water after meals.

Aloin comp. pills, one-tenth grain, night and morning, to relieve the constipation.

R Acid. carbol. pur., gr. xx.
Ungt. zinc. ox. benz., $\frac{3}{4}$ j.

M. Sig. Apply.

Begin the local treatment by cleansing the ears with this ointment spread upon cotton on the applicator, then make a free application of the same ointment. No fluids, soap or water must be used, as they nearly always prove deleterious.—*May, Kan. Med. Jour.*

CHOLERA INFANTUM. — Lesarge (*Montpellier Méd.*) advises:

1. Strict diet; not more than 200 grams of milk or even nothing but cracked ice to allay thirst. Ingestion of milk aggravates the digestive troubles. When gastro-intestinal symptoms have almost disappeared, feeding to be begun gradually, the milk at first being iced.

2. Give twenty to thirty grams of cognac or rum per day, in four to eight doses, either pure with ice, or in black coffee, one teaspoonful of the alcoholic liquor to a tablespoonful of coffee.

3. Hot bath (98° to 100°) lasting ten minutes, morning and evening. Add a little mustard during the last few minutes. Gentle friction with warm cloths or cotton wool. Hot water bottle.

4. At first, while there is fever and no sign of collapse, give one cg.

calomel in a teaspoonful of water every two hours for twelve hours; or the following:

R Tinct. op. camphor (paregoric), gtt. x.
Acid. lact., 3 ss.
Syr. simpl., fl. 3 iv.
Aq., fl. $\frac{3}{4}$ iij.
Ess. menth. pip., gtt. ij.

Sig. One teaspoonful with ice, every half hour:

Or the following mixture of HCl and lactic acid:

R HCl or acid. lact., 3 ss.
Aq., fl. $\frac{3}{4}$ iiss.
Syr., fl. $\frac{3}{4}$ iij.

During the period of algidity, twenty to twenty-five centigrams of caffeine in water, given in two to four doses, have a marked diuretic effect and heighten the arterial pressure.—*Pediatrics.*

TINCTURE OF MYRRH IN DIPHTHERIA.—Miloslawsky recommends painting the throat five or six times a day with undiluted tincture of myrrh and the use of a one per cent. solution as a gargle. He also prescribes internally as follows:

R Tinct. myrrhæ, m 40.
Glycerini, m 80.
Aq., $\frac{3}{4}$ iv.

M. Sig. One to four teaspoonfuls every two hours, according to age of patient.—*Louisville Med. Mon.*

SILVER NITRATE IN THE PERSISTENT DIARRHŒA OF CHILDREN.—The following formula (*Clinique*, January 1, 1898; *Pædiatrics*, February, 1898) has been recommended:

R Silver nitrate, gr. j.
Dilute nitric acid, gtt. v.
Mucilage of acacia,
Syrup of orange peel, aa 3 iv.

M. Sig. A teaspoonful every three or four hours.—*New York Medical Journal.*

EAU D'ALIBOUR IN THE TREATMENT OF IMPETIGO.—Sabouraud (*Lyon médical*) has revived this ancient medicament, at least three hundred years old, and states that it is an antiseptic of the first order. There are many formulæ for its preparation. The author gives the following:

- R Water, 200 parts.
Saturated camphor water, q. s.
Copper sulphate, 2 parts.
Zinc sulphate, 7 parts.
Saffron, 0.4 part.

M.

(The author does not state how the compounder is to know when he has added "a sufficiency" of camphor water, or whether the saffron is left to float about in the solution or is separated by filtration at the end of some definite period. Besides, one should be very cautious in the topical use of copper sulphate; in some persons it gives rise to terrible pain.)
Ex.

MIGRAINE.—Dr. Freiser (*Gazette hebdomadaire de médecine et de chirurgie*) recommends during the attack the following formula:

- R Valerianate of menthol, gr. 75.
Distilled water, m 375.
Syrup of maidenhair (*Adiantum capillus Veneris*), m 450.

M. Fifteen drops to be taken twice an hour.

In those cases accompanied by marked contraction of the pupil he makes use of caffeine according to the following formula:

- R Citrate of caffeine,
Menthol, aa gr. viiss.
Quinine, gr. xv.

M. Divide into ten powders. One to be taken every two hours.—*New York Medical Journal*.

DIOSCORINE.—One of the most poisonous species is "Dioscorea hirsuta," known in Java under the name of *gadocug*. From this, in 1894, Boorsma isolated an impure alkaloid, which has recently been obtained pure and investigated pharmacologically by Pflugge and Schutte. The alkaloid is a crystalline body, melting at 43.5° C., and is a monacid base. Its formula is $C_{13}H_{11}NO_2$. It gives definite color-reactions with the usual reagents, and these, together with the melting-point, the

crystalline form of the picrate, etc., can be used in its identification in toxicological cases.

Pharmacologically it belongs to the picrotoxin group of poisons. After subcutaneous administration it produces violent convulsions in all the animals (perch, frogs, mice, guinea-pigs and rabbits) investigated followed, after a variable time, by paralysis. It has no effect on the peripheral nerve terminations or muscles, and is without influence on bacteria and the coloring matter of the blood.

The treatment of dioscorine poisoning suggested is similar to that of strychnine or picrotoxin. Wash out the stomach and administer chloralhydrate and potassium bromide, and during the tetanic paroxysms induce chloroform anæsthesia. — *American Medical-Surgical Bulletin*.

INOPERABLE UTERINE CANCER. Bernhart (*Centralblatt für Gynäkologie; Progrès médical*) recommends the injection once in four days of thirty minims of the following solution:

- R Salicylic acid, 6 parts.
Alcohol at 90°, 1,000 parts.

M. There is at first some exacerbation, then disappearance of the pains and retraction of the tumor. *New York Medical Journal*.

SALICYLIC ACID OINTMENT IN RHEUMATISM:

- R Salicylic acid,
Oil of turpentine,
Lanolin, aa 3 ss.
Lard, 3 ij.

This is applied to the affected joint and thickly covered with non-absorbent cotton (wadding), which is covered with gutta-percha tissue and kept in place by a flannel bandage. After the superficial epidermis is destroyed, the turpentine is left out from the above formula. Four cases are reported, showing the satisfactory action of the ointment.—*Sterling, Ex.*

LUPUS ERYTHEMATOSUS.—

- R Sol. Fowleri, 4.
Aq. dest., 20-30.
Chloroformi, gtt. 2.

M. Sig. Apply locally, morning and evening.—*Schutz, Zeitschr. f. prakt. Aerzte*.

NITROGLYCERIN IN ANGINA PECTORIS.—It is authoritatively stated that the most efficacious form of administering nitroglycerin in angina pectoris is the following:

℞ Nitroglycerin, gr. iij.
Tinct. capsici, 3 ss.
Spir. rectificat., 3 iij.
Aqua menth. pip., 3 iij.

M. Sig. Two to ten drops.

In one minute the action of the drug is manifest, and in scarcely three minutes the pain is entirely done away with. As the patient grows accustomed to the dose it must be increased, and if this be done carefully there is no great danger to be anticipated.—*Medical Summary*.

PLEURITIS.—In the acute stage:

℞ Potass. acetatis, gr. xv.
Tinct. aconiti rad., gtt. ij.
Codeinæ sulph., gr. $\frac{1}{8}$.
Spir. mindereri, 3 ij.

M. Sig. This mixture to be given every three hours.

When the pleuritis is of the rheumatic type, add ten grains of salicylate of sodium to the mixture given above. To get rid of an effusion of serum, withhold liquids as much as possible and give saline purgatives and diuretics; the blood being thus deprived of its watery elements will frequently take up the effusion from the pleura. If it does not do so the aspirator should be used and from ten to twelve ounces of liquid withdrawn; the remainder will usually promptly disappear. The character of the fluid in the pleural sac may easily be determined by withdrawing some with a hypodermic syringe. When pus is found neither the aspirator nor the trocar and cannula should be used, but a free incision should be made in the seventh or eighth intercostal space on a line with the posterior axillary fold; the pus and fibrinous clots can thus be thoroughly evacuated, after which a drainage tube guarded with a safety pin should be introduced and a dressing of sterile gauze and cotton applied. The tube may be shortened from time to time, and when the discharge is thin or serous may be withdrawn. The initial operation, as well as all subsequent dressings, must be done with strict aseptic

methods; the danger of acute infection is great. It is necessary to excise a portion of rib when drainage cannot properly be secured by thoracotomy. This allows thorough exploration, pockets of pus can be broken up, drainage will be perfect. Irrigation of the pleural sac I believe is harmful; it irritates and delicate adhesions are broken up.—*James, Medical Record*.

NEURALGIA.—

℞ Aconitinæ, gr. iv.
Veratrinæ, gr. xv.
Glycerini, 3 ij.
Cerati, 3 vj.

M. Sig. To be rubbed over the painful parts.

Do not apply to any abraded surface.—*Da Costa*.

Or:

℞ Quininæ sulph., 3 j.
Morphin. sulph.,
Acid. arsen., aa gr. iss.
Ext. aconiti, gr. xv.
Strych. sulph., gr. j.

M. ft. pil. No. xxx. Sig. One thrice daily.—*Gross, Med. Rec.*

ACUTE FOLLICULAR TONSILLITIS.—Dr. E. Fletcher Ingals, of Chicago, recommends the application to the inflamed tonsil of a 50 per cent. solution of guaiacol in oil of sweet almonds. Internally:

℞ Potass. bromide, gr. 80.
Sod. salicyl.,
Tinct. opii deodor., aa 3 j.
Cascara cordial, ad 3 j.

M. Sig. Teaspoonful every four hours in water.—*Chicago Clin. Rev.*

SEA-SICKNESS.—Dr. A. Morel-Lavallée recommends the following mixture to control the vomiting of sea-sickness:

℞ Menthol, gr. iss.
Cocaine hydrochlorate, gr. iij.
Alcohol, 3 ij.
Simple syr., 3 j.

M. Sig. One teaspoonful every half hour.—*Practitioner (London)*.

URÆMIC HEADACHE.—

℞ Potass. citrat., 3 ij.
Spir. juniperi, 3 vj.
Æther. nitr., 3 ij.
Inf. scoparii, 3 vj.

M. Sig. A wineglassful t. i. d.—*Day, Med. Rec.*

"ROTTERINUM."—

℞ Acidi citrici,
Thymoli, aa gr. $1\frac{1}{2}$.
Acidi salicylici, gr. 10.
Acidi boracici, gr. 45.
Zinci chloridi,
Zinci sulphocarbolatis, aa gr.
75.

M. et ft. pastilli No. iv.

This is a disinfectant and antiseptic mixture, officially recommended in Bavaria as a substitute for carbolic acid and corrosive sublimate. To make a proper strength solution dissolve one pastil in a quart of water. *Roth, Med. Rec.*

GNORRHEA.—Prof. Keen gives the following prescription as useful in case of gonorrhea:

℞ Hydrarg. chlor. corros., gr. 1-6.
Zinci sulpho-carbolat., $3\frac{1}{2}$.
Acid. boric, 3 ij.
Liq. hydrogen peroxide, fl. $\frac{3}{4}$ vj.

M. Sig. Use as injection.

If the urethra be very irritable there may be added also from gr. xvij to gr. xxiv of the watery extract of opium.—*Louisville Med. Mon.*

THE TREATMENT OF BRONCHIOLITIS, ATELECTASIS, ETC., OF VERY YOUNG INFANTS BY SCHULTZE'S SWINGING METHOD.—Fr. Schilling (*Müch. Med. Wochenschr.*), does not advocate this method of treatment in all young infants who suffer with bronchial affections, but uses it only in grave cases of dyspnea and asphyxia, where the secretions are retained in the respiratory passages on account of insufficiency of the pulmonary and respiratory muscles. In cases of this kind this swinging method is, however, very effectual, as Schilling demonstrated in seven cases, the children ranging in age from two days to fifteen weeks. All of these cases—and among these were a few desperate ones—were favorably influenced, the mucus being removed by this means from the large bronchi, and frequently at the same time flowing out from the nose and mouth, after which the disease at once showed improvement. It goes without saying that care should be exercised so as to do no harm with these manipulations. The physician should himself carry out this treatment,

visit the patient several times daily; watch him carefully for some time; never exceed at one sitting the number of swinging motions by eleven or twelve. He should, after each motion, make a pause to observe the respiration, and remove the mucus when necessary by the finger, etc. Where these rules were carefully observed, Schilling has never seen any untoward symptoms.—*Pediatrics.*

SERVICEABLE REMEDIES FOR CHRONIC ULCERS.—The old fashioned pulverized alum, an astringent irritant, does well frequently, but does not seem irritating enough for the more indolent cases.

Potassium permanganate, five to ten grains per ounce in solution, is a capital remedy locally and especially where there is a fetid odor. If too painful in this solution, reduce one-half.

Balsam of Peru is a trump card for stimulating granulations and especially where complete atony exists. It should be applied as an ointment. *The Med. Summary.*

SCARLATINA. — Begin treatment with the administration of calomel; then give throughout the disease:

℞ Chloral, gr. xxx.
Syr. lactucarii,
Aq., aa $\frac{3}{4}$ ss- $\frac{3}{4}$ j.

M. Sig. Teaspoonful in ice water every two or three hours.

Complete narcotism should never be attained.—*Wilson, Polyclinic.*

NEW METHOD FOR REDUCING HERNIA.—Stafford, in *Amer. Med.-Surg. Bull.*, advises continuous pressure for reducing a hernia. An ordinary rubber bandage, two and a half inches wide and three yards long, is wound about the scrotum and penis, commencing below the center and drawing tighter at the lowest part, until all the parts are covered. This is less painful and more effective than taxis. The same method is employed for prolapsed rectum.—*Ex.*

USEFUL LOTION IN URTICARIA.—

℞ Subacetate of lead, gr. xv.
Dilute hydrocyanic acid, 3 iv.
Alcohol, 3 viiss.
Aq., to make, $\frac{3}{4}$ ij.

Louisville Med. Mon.

CONSTIPATION.—The *Clinica Moderna* gives the following formula:

R Aloes, gr. 30.
Resin of jalap,
Resin of scammony,
Turpeth root, aa gr. 15.
Ext. of belladonna,
Ext. of hyoscyamus, aa gr. 2½.
Medicinal soap, q. s.

M. Divide into fifty pills. One or two to be taken at bedtime for a fortnight or a month. At the same time the large intestine is to be treated with massage, and Carlsbad water is to be taken.—*N. Y. Med. Jour.*

DELICATE TEST FOR SUGAR.—

R Cupric sulphate, gr. xxvij.
Glycerin, 3 iij.
Aq., 3 iiss.
Liq. potassa, ad. ʒ iv.

Dissolve the cupric sulphate in glycerine and heat. When cold add the liquor potassa. Pour a drachm of the solution in a test tube with two or three drops of a saturated solution of pure tartaric acid, and boil. Now add, drop by drop, eight drops of urine. If there is no reaction there is no sugar. Sugar is present if the reaction yields a yellowish, reddish or greenish-gray deposit.—*Scientific Amer.*

DIARRHEA MIXTURE.—

R Acidi carbolici, m xxiv.
Tinct. opii deodoratæ, fl. 3 j.
Bismuth subnitratis, 3 iv.
Acaciæ pulv., q. s.
Syr., q. s. ad fl. ʒ viij.

M. et ft. emulsio. **Sig.** Dessert-spoonful every three hours.—*The Med. Stand.*

MODERN TREATMENT OF TUBERCULOSIS.—C. Denison (Denver) read a paper entitled "Theory and Conclusions on the Modern Treatment of Tuberculosis." Representing the benefit to patients suffering from tuberculosis as 100 per cent., he said 45 per cent. were affected by climate and changes involving mental influence, exercise and out-of-door life; 30 per cent. were due to good feeding, local supervision and medical treatment; 25 per cent. to inhaling, local medication and antitoxin treatment. So saturating the blood with creosote, for instance, that the bacil-

lus would be stopped in its growth and the patient not be hindered thereby, was, he thought, a mere speculation. He doubted whether inhaled substances ever reached the air vesicles and terminal bronchioles where the disease was located. He would like to demonstrate more clearly than had been done heretofore the fact that (1) correct inhaling, or more properly, exhaling; (2) altitude above sea level; (3) rightly directed gymnastic training, all worked on the same principle of mechanical distension of the air cells.—*British Med. Jour.*

NERVOUSNESS AND GENERAL MALAISE.—For the nervousness and general malaise of the period of menopause:

R Ammon. bromid., 3 ij.
Sodii bromid., 5 iv.
Spir. ammon. aromat., fl. 3 vj.
Aq. camph., q. s. ad fl. ʒ vj.

M. **Sig.** Tablespoonful every four hours.—*Parvin, Med. Council.*

SALICYLATE OF SODIUM IN TOOTHACHE.—Dr. Frederick C. Coley believes salicylate of sodium to be the best remedy in toothache arising from catching cold. A dose of fifteen grains will usually relieve the pain promptly; and if repeated every four hours the inflammation may entirely subside, leaving the carious tooth to be disposed of according to circumstances. Fifteen grains of sodium salicylate, with fifteen minims of tincture of belladonna, will often procure refreshing sleep instead of a night of agony.—*New York Medical Jour.*

INTESTINAL COLIC.—

R Bismuth. subnit., ʒ ss.
Pulv. cinnam., 3 j.
Ext. nucis vom., gr. j.
Sacch. alb., ʒ ij.

M. ft. pulvis. **Sig.** A teaspoonful before dinner every day.—*The Med. Sum.*

CHILDREN WITH TAPE-WORM.—Guida recommends the following:

R Tamarind pulp, gr. 450.
Powd. kamala, gr. 90.
Lemon-juice, q. s.

M. The whole to be taken at one dose.—*N. Y. Med. Jour.*

ANTISEPTIC POWDER.—

- ℞ Pulv. camphoræ, parts 5.
 Pulv. bismuthi subnitrat.,
 Pulv. acidi salicylici, aa parts
 20.
 Pulv. iodoform, parts 55.

M. Sig. Apply to wounds and ulcerous surfaces.—*Casozzani, Med. Rec.*

LA GRIPPE.—We have already quoted, according to the *Ther. Gaz.*, the treatment given by Lyon for certain of the symptoms of influenza. He also gives the following prescriptions for additional complications. For the coryza, particularly if it is marked and the discharge purulent with or without epistaxis, he employs the following:

- ℞ Vaseline, ʒ ij.
 Boric acid, 3 ij.
 Menthol, gr. viij.

A little of this is placed in the nostril, by the finger, five or six times a day, or the following powder may be used:

- ℞ Boric acid, 3 ij.
 Menthol, gr. ij.
 Hydrochlorate of cocain., gr. j.

A small pinch of this is snuffed up the nostrils a few times a day. If irrigation of the nasal cavity by means of hot boric acid water is needed, it should be done with care lest infection of the Eustachian tube take place. For the sore throat and laryngitis he recommends hot water compresses to the throat. Inhalations of steam laden with the following drugs, which are placed in the hot water, are useful:

- ℞ Alcohol (70 %), ʒ j.
 Menthol, gr. xv.

A teaspoonful of this is to be added to a pint of hot water and at the same time another teaspoonful of benzoin may be poured in and the steam inhaled. Sometimes gargling with very hot water, to which has been added boric acid, is useful, or two teaspoonfuls of the following mixture may be placed in hot water and used as a gargle:

- ℞ Bromide of potassium, 3 j.
 Hydrochlorate of morphin.,
 gr. ij.
 Antipyrin., gr. xxx.
 Hydrochlorate of cocain., gr.
 ij.
 Distilled aq., ʒ ij.

In the early stages of the bronchitis without expectoration, but with cough, cherry-laurel water, paregoric, tincture of hyoscyamus, aconite, or benzoate of sodium are useful. The following may be prescribed:

- ℞ Fluid ext. of hyoscyamus, 3 j.
 Cherry-laurel aq., 3 iij.
 Syr. of tolu,
 Syr. of orange flowers, aa 3 vj.
 Syr., ʒ iv.

M. Sig. A dessertspoonful every two hours.

Or:

- ℞ Dover's powder, gr. xxx.
 Powd. squill, gr. xx.
 Quinin. sulphate, gr. xxx.

M. Sig. Make into twenty cachets and take three to five a day.

Or the following may be employed:

- ℞ Hydrochlorate of morphin, gr.
 j.
 Hydrochlorate of cocain, gr. ij
 Antipyrin, gr. xxx.
 Aq., ʒ iv.

M. Sig. Three or four teaspoonfuls a day in a little hot whiskey or rum.

For bronchitis with abundant expectoration:

- ℞ Terpene hydrate, gr. iv.
 Glycerin and syr., q. s. to make
 one pill.

M. Sig. Three to five a day.

Or:

- ℞ Terpene,
 Benzoic acid, aa gr. ij.
 Dover's powder, gr. j.

M. Sig. Make into one pill and take six a day.—*Practical Medicine.*

INCONTINENCE OF URINE.—Where the urine is dark in color and concentrated, is very often successfully treated as follows:

- ℞ Potassi citratis, ʒ ss.
 Spir. etheris nitrosi, fl. 3 vj.
 Aq., q. s. ad fl. ʒ j.

M. Sig. Dessertspoonful every four hours in equal quantity of water. *Louisville Med. Mon.*

ACUTE GASTRIC CATARRH.—

- ℞ Bismuth subnit., gr. x.
 Potass. brom., gr. xv-xx.
 Acid. hydrocyan. dil., m v.
 Spir. chloroform, m x.
 Mucil. acac., 3 ij.
 Aq., q. s. ad ʒ j.

M. Sig. Every three hours.—*Brunton, Med. Rec.*

PRURITUS VULVÆ.—Dr. E. T. Beall (*Texas Med. News*) gives the following formula and says it has served him well in many cases in which measures suggested by other writers have failed:

- ℞ Quinine sulphate, gr. 20.
Menthol, gr. 8.
Carbolic acid, gr. 24.
Citrine ointment, gr. 60.
Ichthyol, gr. 150.
Lanolin, gr. 360.
Castor oil, gr. 600.

M. To be applied freely after ablu-
tion of the vagina and vulva with
hot water.—*N. Y. Med. Jour.*

NEW TREATMENT FOR SYPHILIS.—
Dr. Lalande, a homœopathic physi-
cian, of Lyon, recently proposed be-
fore the Société de Biologie de Paris
to treat syphilis with hypodermic in-
jections of a saline solution of pow-
dered calves' horn in the proportion of

- ℞ Pulv. cornu, grm. 60.
Sod. chlor., grm. 10.
Aq. dest., grm. 1000.

The doctor claims the most satis-
factory results for his prescription;
old cases in which he used the treat-
ment for two years had no relapses
during that time.—*Jour. des Practi-*
ciens.

HEMOPTYSIS.—Dr. Harrington Sains-
bury's views on the treatment of
hemoptysis are briefly given in *Treat-*
ment. In tuberculosis there may be
no physical signs, and yet oozing oc-
curs from small vessels with miliary
aneurisms. This initial hemorrhage
may be profuse enough to cause
death, even when no ulceration nor
consolidation exists, but usually when
the hemorrhage is large, under these
circumstances (absence of signs), ul-
ceration is present; all the more when
the signs also are present (consolida-
tion, shrinkage, cavitation). Sudden
copious hemorrhage in a case of
phthisis of long standing with local-
ized lesion indicates aneurismal dila-
tation in a vessel of considerable
size.

As the bleeding point is not acces-
sible, treatment is limited to reduc-
tion of blood pressure and improve-
ment of blood. To accomplish the
former give the patient a recumbent
posture with head and shoulders
comfortably raised after the patient

has been calmed from the excitement
consequent on the accident. The pa-
tient should be carried to the bed,
not allowed to walk there. Matter-
of-fact attention must be given to
details, without hurry or excitement
by nurse. Patient must not talk, nor
raise the voice. The attendants must
not whisper. Give broken ice to
suck. Treat cough with morphia
(one to ten grains upwards). Keep
bowels open to avoid increased blood-
pressure. Keep room cool and well
ventilated. Give bland and unstim-
ulating nourishment, milk especially.
Apply bag or hot flannels to chest to
quiet circulation in mucous mem-
brane of bronchial tubes, as occasion
requires. Give chloride of calcium in
doses varying from eight to sixteen
grains repeated *pro re nata*.—*Amer-*
ican Medico-Surgical Bulletin.

MIXTURE FOR FLATULENT DYSPEP-
SIA.—Farquharson (*Jour. de méd. de*
Paris) recommends the following:

- ℞ Bicarbonate of sodium,
Powd. sugar, aa gr. 120.
Aromatic spir. of ammonia,
gtt. 40.
Peppermint aq., ʒ 8.

M. A tablespoonful to be taken
after each meal for flatulent dyspep-
sia.—*Ex.*

FRACTURE OF NOSE.—When the
bridge has been depressed, elevation
may be attempted by a Sir Astley
Cooper director. Thrust a pin from
side to side through the nose and
put a piece of cork on each project-
ing end of the pin, pushing the pieces
together until the bridge is sufficient-
ly elevated. The bony deformity
does not tend to disappear, so that if
it is desired to remedy it, it should be
done at once.—*Davis, Annals of Sur-*
gery.

LONDON COUGH MIXTURE.—

- ℞ Acid benzoic, gr. xij.
Ol. anisi, m ij.
Spir. ammon. arom., 3 iss.
Spir. æther nitrosi, 3 iij.

M. and add:

- Vin. ipecacuanhæ, 3 iij.
Tinct. capsici, m xx.
Glycerini, 3 iv.
Inf. senegæ conc., ad ʒ iij.

M. Sig. Allow to stand until
clear and decant.—*Pacific Med. Jour.*

COUGH IN MEASLES.—

℞ Sweet spir. of nitre, $\frac{3}{4}$ ij.
 Muriate of ammonia, $\frac{3}{4}$ ss.
 Dover's powder, 3 j.
 Simple syr., $\frac{3}{4}$ iij.

M. Sig. Shake well. Dose, a teaspoonful to a tablespoonful.—
Ebert, Med. Rec.

TINCTURE OF IODINE IN THE GASTRO-ENTERIC DISORDERS OF CHILDREN. Grosch (*Riforma medica*) says that the effects of iodine in gastro-enteric complaints of children are very rapid and, while less so in adults, they are nevertheless very certain. The fever and diarrhea cease, the sensorium recovers, the headache is alleviated. To children it is given in doses of from two to four drops in sugar water every eight hours for three days; to adults are given six drops three or four times a day.

In acute infective gastro-intestinal catarrh a tablespoonful of the following mixture is given once or twice in the twelve hours:

℞ Tinct. of iodine, gtt. 15-18.
 Simple syr., gtt. 300.
 Distilled aq., gtt. 2,250.

M.—*Ex.*

TREATMENT OF ERECTILE TUMORS BY INTERSTITIAL INJECTIONS OF PERCHLORIDE OF IRON.—Auger (*Revue du Practicien*) states that for thirty years he has employed this treatment without accident. If the tumor is small, he uses the following formula:

℞ Thirty-per-cent. solution of iron perchloride, parts 25.
 Sodium chloride, parts 15.
 Aq., parts 60.

M. The tumor is pierced with the hypodermic syringe needle. If a drop of blood presents itself, the point of the needle is known to be in a sanguineous collection, and he injects a few drops of the solution. In a few months the tumor disappears; if it grows again, a second injection is given. It is rare for more to be required. If the tumor is large, one need not fear to inject fifteen, twenty or even forty drops of the solution; or the following, which is more active, may be employed:

℞ Thirty-per-cent. solution of iron perchloride, parts 25.
 Zinc chloride, parts 3.
 Aq., parts 60.

M. The injection should be thrown in slowly and without any jerkiness. In the case of a large angioma it is necessary to practice compression of the periphery of the tumor. During the injection the tumor swells, but does not become hardened by the coagulation of the blood until after about fifteen minutes; then the peripheral compression may be discontinued. For the first twenty-four hours the tumor grows larger and harder; then retrogression begins, but it is very slow and takes several months for its completion.—*Ex.*

OINTMENT FOR THE PAIN OF SO-CALLED SPONTANEOUS GANGRENE.—Camescasse (cited in the *Presse méd.*) recommends the following formula:

℞ Salicylic acid,
 Ol. of turpentine,
 Lanolin, aa part j.
 Vaseline, parts vij.

M. He insists that it must be rubbed, not upon the affected part, but upon the sound skin.—*Ex.*

METHYL SALICYLATE IN THE TREATMENT OF GONORRHEA.—By reason of the great power possessed by methyl salicylate of penetrating investing membranes, M. Duquaire has conceived the idea that it will reach the gonococci, even when they are seated in the deepest layers of the mucous membrane. He reports a case in which its employment cured the disease in five days, but he does not generalize from that one case. He uses the following solution:

℞ Methyl salicylate, part $\frac{1}{2}$.
 Bismuth subnitrate, parts 10.
 Liq. vaseline, parts 50.

M. Sig. Three injections should be given daily. The patient should urinate, then take the injection and hold it in the urethra as long as possible. The injections are not painful.—*Louisville Med. Jour.*

VAGINAL INJECTIONS.—

℞ Powd. alum,
 Powd. boric acid,
 Powd. borax, aa $\frac{3}{4}$ j.
 Hydrastine sulphate, gr. ix.
 Carbolic acid,
 Ess. of cinnamon, aa gtt. xx.

For each injection, dissolve a teaspoonful of the powder in a pint of water.—*The North. Amer. Med. Rev.*

VESICULAR ECZEMA OF SCROTUM.—According to Wittzack it is not advisable to use a powder, since when mixed with the secretion from the affected surface it cakes and falls off. The application of compresses wet with an astringent solution is recommended, as for instance:

℞ Aluminii acetat., 3 v.
Liq. plumbi subacetat., 3 ss—3 iiss.
Aq., ʒ iij.

M. Sig. External use.

If the epithelium is gone it is best to employ a mixture of one to two parts of white precipitate ointment with Lassar paste. It will often be found helpful to cauterize by means of a solution (ten to fifty per cent.) of caustic potash applied on a cotton tampon; the caustic is then washed off and the part covered by Lassar paste. Or nitrate of silver (a ten or twenty per cent. solution) may be chosen.—*Med. News.*

ASTHMA.—

℞ Potassii iodidi, 3 iij.
Ext. belladonnæ, fl., 3 j.
Ext. lobeliæ, fl., 3 ij.
Ext. grindeliæ, fl., 3 iv.
Glycerini,
Aq. destillatæ, aa ʒ iiss.

M. Sig. Take a teaspoonful every two, three or four hours, as necessary.—*Bartholow, The Atlanta Med. and Surg. Jour.*

FORMALDEHYDE AS A DISINFECTANT. W. H. Park and A. R. Guerard (*Phila. Med Jour.*) conclude an elaborate and lengthy experimental research into the value of this disinfectant with the statement that formaldehyde gas is superior to sulphur dioxide as a disinfectant for dwellings:

1. Because it is more efficient and rapid in its action.
2. Because it is less injurious in its effects on household goods.
3. Because it is less toxic to the higher forms of animal life.
4. Because, when supplied from a generator placed outside the room and watched by an attendant, there is less danger of fire.

Apart from the cost of the apparatus and the greater time involved formaldehyde gas, generated from commercial formalin, is not more

expensive than sulphur dioxide, viz., from seven to eight cents per 1000 cubic feet being the cost in either case.

In conclusion they say formaldehyde gas is the best disinfectant at present known for the disinfection of infected dwellings. It is inferior in penetrative power to steam and dry heat at 230° F., but for the disinfection of fine wearing apparel, furs, leather, upholstery, books and the like, which are injured by great heat, it is better adapted than any other disinfectant.—*Ex.*

GOUT.—

℞ Vini sem. colchici, ʒ ss.
Potass. iodidi, 3 ij.
Liq. potass., ʒ iiss.
Tinct. zingiberis, ʒ ij.

M. Sig. One dram twice daily in warm water.—*Hodgson.*

Or:

℞ Lithii benzoat, ʒ ij.
Aq. cinnamomi, ʒ iiss.

M. Sig. One dram in a wineglass of water every four hours.—*Jaccoud, Med. Rec.*

OBJECTIONS TO IODOFORM AND CARBOLIC ACID.—In the *Amer. Jour. of Obstetrics*, Dr. Hochsinger is quoted as advising against the use of iodoform and carbolic acid for the umbilical cord, or other local conditions requiring an antiseptic dressing in early infancy. Cases of severe poisoning and death, due to these drugs, are cited. Iodoform, even without severe toxic symptoms, may cause erosions around the umbilicus and should not be used in dressing the stump, nor in cases of circumcision, except, perhaps, for the first day, in the case of the latter condition.—*Pittsburg Med. Rev.*

PAINLESS BLISTER.—

℞ Mentholis,
Chloratis, aa gr. xx.
Ol. theobromatis, gr. xxx.
Spermaceti, 3 j.

M. Make into a paste.—*La Méd. Moderne.*

HEMORRHOIDS OF PREGNANCY.—

℞ Sulphur precip.,
Cream of tartar, aa 3 j.

Sig. As necessary.—*Da Costa, N. Y. Poly.*

COMEDO OR BLACKHEADS.—To remove comedo or blackheads, use pressure, frequent washings with hot water and tincture of green soap, and the following stimulating lotion:

R Zinci sulphatis,
Potassii sulphureti, aa 3 j.
Aq. rosæ, 3 iv.

M. If irritation is produced, discontinue the prescription for a time. *Stelwagon, Ex.*

BENZOSOL IN DIABETES.—Dr. N. B. Aspinwall, of Plymouth, Ind., in a paper read before the Marshall Co. Physicians' Association, describes three cases of diabetes mellitus treated with benzosol, claiming most excellent results. He concludes that, in addition, as an antidiabetic regimen, he would certainly recommend a trial of benzosol in every case of this disease, especially in view of the results obtained in the cases of the three patients mentioned. The benzosol was given in doses of five grains every four hours while awake.—*The Med. Bull.*

DELIRIUM TREMENS.—

R Potassi bromidi, 3 j.
Chloralis, 3 iv.
Tinct. digitalis,
Tinct. capsici,
Tinct. zingiberis,
Spir. ammoniæ aromatici,
Syr. aurantii cortici, aa 3 j.
Aq., q. s. ad. 3 viij.

M. Sig. Dose, a tablespoonful.—*Bellevue Hospital.*

ALCOHOLISM IN CHILDREN.—Combe, of Lausanne, discusses (*Annal de Medicin et Chirurg. Infant.*) in an exhaustive manner the ways in which infants often become poisoned with alcohol and the effects. He points out that on account of the greatly developed nervous system of children the effects of alcohol are much more marked in them than in adults; and claims that poisoning by this drug is much more frequent in nurslings than is supposed. The most usual cause is the secretion of alcohol with the milk of intemperate wet nurses. A second cause is the practice of cleansing nursing bottles with alcoholic solutions before putting them into the mouths of infants. Combe describes two forms of alcoholism in

nursing children; the acute and the chronic. The acute form arises from access to their systems of relatively larger amounts of alcohol whether mixed with their milk or with water. This is characterized by convulsions. Striking cases of it are reported by the author. In the chronic form the babies are excitable, poor sleepers, cry much and fail to take on flesh as they should. Both forms yield quickly when the nurse is changed or the alcoholization is stopped.—*Pediatrics.*

OTITIS MEDIA.—Bolt recommends in cases of purulent otitis media, where operative procedures are either contraindicated or not permitted, the following:

R Storax,
Bals. Peru, aa gr. iv.
Alcohol,
Aq. destil., aa 3 iiss.

M. Sig. Drop into the ear p. r. n.—*The Med. Fortnightly.*

FISTULA IN ANO.—A simple fistula in ano with a straight course and no branching or tributary tracts, may be quickly cured by completely excising the diseased tissue and obliterating the entire wound cavity by means of catgut sutures. No sutures, however, should pierce the mucous membrane. The same operation may be performed in the more complicated fistulæ, but the chances of primary union are correspondingly less.—*Louisville Med. Mon.*

OIL OF TURPENTINE IN THE TREATMENT OF CORNEAL OPACITIES.—Mr. G. A. Berry (*Edinburgh Med. Jour.*) states that a good and not unduly stimulating effect may be got by the daily use of eye-drops made according to this formula:

R Ol. of turpentine, part j.
Ol. of almonds, parts ij.

M.—*N. Y. Med. Jour.*

INTERCOSTAL NEURALGIA.—

R Chloralis,
Camphoræ,
Mentholi, aa 3 j.

M. Sig. With a brush spread a layer of this mixture (which is liquid) over the painful parts. Renew the application when the pain reappears.—*Solis-Cohen, The Atlanta Med. and Surg. Jour.*

KUMYSS.—Mr. H. W. C. Martin, of Chicago (*Western Druggist*), in quite an extended experience in the manufacture of kumyss, gives the following details for its preparation:*

Fresh milk, 14 gal.

Skimmed milk, 28 gal.

Water, 6 gal.

Sugar, granulated, 10 lb.

Milk sugar, 2 lb.

Yeast, 1 package, or about $\frac{1}{2}$ oz.

These portions were selected for the reason that cow's milk contains, according to the best authorities, about 4 per cent. of fat, while mare's milk contains only about 1 per cent. By using skimmed milk and water, the 4 per cent. is reduced to the desired 1 per cent. Again, the addition of water has reduced the phosphates in cows milk to near the desired amount present in mare's milk, while the subtraction of casein from the skimmed milk, together with the addition of water, reduced the amount of casein from $4\frac{1}{2}$ to 5 per cent. to about the $1\frac{1}{2}$ or 1 7-10 per cent. contained in mare's milk. Take the skimmed milk, and by the aid of a steam bath, raise it to the temperature of 90 to 100 degrees Fahrenheit. Add one-third of the yeast, first dissolved in a small quantity of water, and keep it at this temperature until the casein separates into a thick mass. Pour off the whey and strain it through muslin into a forty-gallon cask already containing the fresh milk. Now add the balance of the yeast dissolved in a small quantity of the milk, and lastly the water with the sugar dissolved in it. The cask should be made of oak with a wooden faucet just below the lower hoop, to which is attached a rubber hose about fifteen feet long and a half-inch in diameter, so as to allow it to go into the neck of a quart champagne bottle. About four inches from the end there is attached to the tube an arrangement similar to those we see on fountain syringes, whereby the flow can be controlled at will. The kumyss is now stirred about once in five or ten minutes while the bottling is proceeded with. Place the bottles in rows convenient to the cask, and fill to within three inches and a half to four inches of the top. When all are filled soak some straight, wide corks of proper size in luke

warm water and cork thoroughly with the aid of a corking machine, and so that the corks do not protrude more than one-quarter of an inch above the neck. Tie with good, stout twine, the same as you would a bottle of citrate of magnesia, and lay on their sides. The temperature of the room should be about 70 to 80 degrees Fahrenheit, and the bottles should be shaken once in five or six hours. At the end of fifteen or eighteen hours, fermentation will have perceptibly begun, and they are ready for the ice box. The temperature of the box should be kept under 55 degrees Fahrenheit to allow a slow and even fermentation to go on. If kept below this point kumyss does not need any more shaking after it is in the ice box. It is only too high a temperature and rapid fermentation which causes the lumps and grittiness which should be entirely absent in a good kumyss.—*The Medical World*.

ALOPECIA.—

R Ext. pilocarpī fl., $\frac{3}{4}$ j.

Tinct. cantharidis, 3 iv.

Linimenti saponis, q. s. ad $\frac{3}{4}$ iv.

M. Sig. Rub into the scalp daily.
Bartholow, The Atlanta Med. and Surg. Jour.

DYSMENORRHEA.—Dr. V. Oswiecimski (*Klinisch-therapeutische Wochenschrift*), classifies three forms of this disorder: (1) Inflammatory, due to inflammation of the uterus itself, its adnexa, or the neighboring organs; (2) nervous, caused by the hyperæsthesia of the uterine mucous membrane; (3) mechanical, dependent upon some obstruction which prevents the flow of blood to and from the uterus.

Under this list the author mentions hypoplasia uteri, stenosis of the cervix, ante flexion of the uterus, and closure of the internal os.—*Medical Record*.

EPILEPSY.—M. Jules Voisin often orders:

R Zinc oxide,

Powd. valerian, aa gr. $1\frac{1}{2}$.

Powd. belladonna, gr. 1-6.

Soap, q. s.

M. Sig. Four such pills to be taken daily.—*La Méd. Moderne*.

HERNIA TREATED BY THE INJECTION METHOD.—Dr. W. W. Brown, of Blackstone, Mass., reports in the *Atlantic Med. Weekly*, cases treated by injection as follows:

- ℞ Creosote, *m* xv.
Morph. sulph., grs. ij.
Glycerite of tannin, 3 j.
Witch hazel, 3 iij.
Reduced by distillation to 3 j.

M. Dose from v to x minims.

The mode of procedure, as practiced by me, is as follows:

Having placed the patient in a recumbent position and the hernia returned to the abdominal cavity, the left index finger is invaginated in the scrotum and the point of the finger pushed well into the canal. The syringe (I use a common hypodermic syringe, with a somewhat longer needle than the ordinary) is then taken in the right hand, using the left finger as a guide, the needle is thrust through the tissues, just beyond the tip of the finger, and slightly elevated toward the opening, and the fluid deposited. This is for oblique hernia; for the direct form, injection the border or over external ring.

This operation should be repeated at intervals of from four to six days, six or eight times, or as often as the case may demand. After the injection, the parts should be slightly kneaded.—*Ex.*

RHUS POISONING.—Dr. J. H. Freeman recommends the following as a specific for rhus poisoning:

- ℞ Ammonia, 3 ij.
Aqua, 3 iv.

Sig. Apply to parts affected two or three times a day.

He has treated hundreds of cases within the past 15 years, and therefore has had abundant opportunity to test the efficacy of the remedy. *Ex.*

ELIMINATION OF MORPHINE.—Morphine is eliminated chiefly by the bowels, to a small extent by the kidneys and still more slightly with the saliva. The man who would use the stomach pump in a case of poisoning by hypodermic injection of morphine would, by most people, be set down as an ignoramus: but he would be right, for it has been shown experi-

mentally that, when the drug is administered subcutaneously, much of it is eliminated by the stomach—in fact, by repeatedly washing out the stomach more than half the quantity injected may be recovered.—*Murrell, A Manual of Pharmacology and Therapeutics.*

ANTISEPTIC FLUID COMP. (SEILER'S).

- ℞ Antiseptic fluid, 3 j.
Sodii bicarbonatis,
Sodii boratis, aa 3 j.
Glycerini, 3 j.
Aq., q. s. ad 3 iv.

M. Sig. Add to one quart of water and use as a disinfectant wash. *Ex.*

CATARHAL PNEUMONIA.—

- ℞ Ammon. carb., gr. xxiv.
Syr. tolu, 3 vj.
Spir. vini gal., 3 iij.
Syr. senegæ, 3 iiiss.
Syr. acaciæ, q. s. ad 3 iij.

M. Sig. Teaspoonful every two hours for a child of two or three years.—*Goodhart and Starr, Ex.*

TYPHOID FEVER.—The whole question of the treatment of typhoid fever might be summed up as follows: Keep the bowels thoroughly open. Keep the alimentary canal as aseptic as possible. Give good nourishing food—that which the patient will readily assimilate. Give plenty of water by both the mouth and the rectum. Use the best intestinal antiseptic known. Never give opium. Never give phenacetin or acetanilid. Give strychnine as indicated. If this plan is followed you will rarely have a death from typhoid fever.—*McCormick, Jour. of the Amer. Med. Asso.*

DIABETES MELLITUS.—

- ℞ Sodii salicylat., 3 iij.
Liq. potass. arsen., 3 j.
Glycerini, 3 j.
Aq. cinnamomi, ad 3 iij.

M. Sig. One dram to one-half an ounce, t. i. d.—*Wilson, Med. Rec.*

LUPUS.—

- ℞ Salicylic acid, 3 2½.
Creosote, 3 5.
Simple cerate, 3 3½.
White wax, gr. 75.

Use externally.—*Unna, Ex.*

DIPHTHERIA.—

℞ Hydrarg. chlor. mit., gr. j.
Sodii bicarb., gr. xxiv.
Pulv. aromat., gr. vj.

M. ft. chart. No. xii. Sig. One powder every two hours.—*Starr*.

Or:

℞ Menthol, 3 iiss.
Toluol, q. s. ad 3 x.

Solve et adde:

Alcohol, abs., 3 ij.
Liq. ferri chloridi, 3 j.

M. Sig. Apply with a cotton swab.—*Læffler, Med. Rec.*

EFFERVESCENT QUININE MIXTURE.

It is stated in the *Jour. de Méd. de Paris* that the following mixture is of advantage in irritable stomach when quinine is to be given:

℞ Sulphate of quinine, gr. ij.
Citric acid, gr. vj.
Simple syr.,
Syr. of orange flower, aa 3 ss.

This is to be placed in a wineglass containing bicarbonate of sodium (from three to five grains) in saturated solution and drank during effervescence.—*Atlantic Med. Weekly*.

ECZEMA OF THE PALM.—Good results were obtained by S. E. Hale, from the following:

℞ Sodii sozoidol, 2.0.
Zinci oxidi, 5.0.
Ungt. petrolii, 10.0.

M. Apply twice daily.—*Cleveland Med. Gas.*

ECZEMA MARGINATUM.—Unna (cited in the *Centralblatt für die gesammte Therapie*) recommends the following application:

℞ Mercury bichloride, part 1.
Ichthyol, parts 20.
Distilled aq., parts 200.

M. To be painted on night and morning and then the part dusted with starch.—*Ex.*

RHEUMATISM, CHRONIC.—

℞ Liqueoris potassii arsenitis,
Potassii iodidi, aa 3 ij.
Syrupi simplicis, 3 iij.

M. Sig. Teaspoonful three times a day in water, between meals.—*De Costa*.

(In the treatment of rheumatism, whether acute or chronic, vegetable cholagogues, such as enonymin, leptandrin, podophyllin, etc., should be

daily administered along with other anti-rheumatic remedies. — Editor) *Medical Standard; The Atlanta Med. and Surg. Jour.*

MELANCHOLIA.—

℞ Zinci valerianas,
Ferri valerianas,
Quininæ valerianas, aa 3 ss.

Ft. massa et in pil. xxx div.

M. Sig. One pill to be taken three times daily.—*Med. News*.

GOUT.—

℞ Tinct. colchici seminis, m xv.
Magnesii carbonatis, gr. vj.
Magnesii sulphatis, gr. xxx.
Aq. menthæ piperitæ, q. s. ad 3 j.

Ft. haustus.

Sig. Repeat according to circumstances.—*University Hospital; The Atlanta Med. and Surg. Jour.*

SIMPLE ANGINA.—

℞ Pot. chlorat., 3 iss.
Pot. bromid., 3 ss.
Ext. belladonn., gr. iv.
Syr. limonis, 3 j.
Syr., q. s. ad 3 iv.

M. Sig. Teaspoonful three times a day.—*Med. Rec.*

ACNE VULGARIS.—

℞ Sulphur præcipitat., gr. 75.
Zinci sulphat., gr. 45.
Potassii sulphat.,
Potassii sulphuret., aa 3 i ½.
Aq. rosæ, 3 3.

M. Sig. To be used as a lotion, at first twice daily, later once a day. *Med. News*.

NEURALGIA.—

℞ Menthol,
Guaiacol, aa 3 j.
Alcohol, absolute, 3 xviii.

M. Sig. One dram of this mixture to be rubbed lightly into the affected part two or three times a day.—*Sabbatini, Med. Rec.*

THERAPEUTICS OF SALOPHEN.—In a report to the *Bulletin Médical*, Dec. 21, 1898, on the therapeutics of salophen, Dr. G. Küss concludes as follows: It would appear that salophen possesses great efficacy in a number of pathological states, besides certain effects which seem to belong to it, as in chorea, psoriasis and affec-

tions of the skin attended with pruritis. It is an invaluable substitute for salicylate of sodium, being incontestably devoid of its disadvantages. Although sodium salicylate is endowed with remarkable anti-rheumatic properties, especially in the severe form of rheumatism, it is sometimes not well tolerated; some patients take it with strong repugnance, while in others having an irritable stomach it is absolutely contra-indicated. Under these circumstances it is serviceable to employ salophen as a succedaneum. Both of these remedies are deserving of a place side by side in the therapeutic armamentarium; and while they have their special indications which should be determined more and more precisely, they share common properties which permits of the substitution of the one for the other.

THE MULFORD SERUM IN DIPHTHERIA.—(The following is an exact and literal transaction of the statements published in *L'Union Médicale du Canada* as part of a report of the proceedings of a session held on November 17, 1898, by the "Committee on Medical Studies" of Laval University, Montreal, Dr. Brennan occupying the chair.)

Dr. Laberge has treated since assuming the direction of the Civic Hospital up to the first of July last, 571 cases of diphtheria. Most of the children are brought to the Hospital several days after the debut of the malady. He lost 77 cases, 31 of the patients dying within forty-eight hours after their respective admissions. Since the first of November lacking a supply of the Roux serum, he has employed the Mulford serum in seventeen cases of diphtheria in initial doses of 1,000 units, with very bad results. Five patients died; nine have had pronounced kidney trouble; three suffered from swelling of the joints; and, finally, the majority of the patients, from very painful generalized eruptions. The results obtained have been so different from those following the use of the Roux Serum that he deems it his duty to inculcate, in this unfortunate series, not serum therapy, but the serum employed.

Following these statements, Dr.

Laberge recited ten descriptions from his notes of the cases mentioned above.

Dr. Duhamel: "I have twice employed the Mulford serum; I was not satisfied with it."

Dr. Mignault: "The serum of Parke, Davis & Company, employed in the dose of 250 units, repeated the following day when necessary, gave very good results in twelve cases. This quantity may be injected in two doses with the ordinary hypodermic syringe, which is convenient, and I consider it sufficient."

Dr. Hervieux: "My young brother was treated at the Civic Hospital by Dr. Laberge, who injected some of the Roux serum and discharged the patient on the fifth day. That evening at home a generalized eruption was observed, accompanied with pains in the joints, which lasted three days. In this case the Roux serum might have been blamed. In questions of this kind it is difficult to judge on the strength of only a few cases. I should prefer to base my opinion on a comparative study founded on statistics."

Dr. Decotret: "We encounter in puerperal infections, eruptions and articular pains of an infectious nature. Perhaps it is the same in diphtheria. I employed the Mulford serum in two cases of diphtheria, one of which recovered without complication; the other died."

Dr. Poissant: "In one case of diphtheria, complicated with scarlatina, I gave without success 500 units of the Mulford serum. I charged the blame to the insufficient dose rather than to the serum itself."

Dr. Laberge (answering a question): "The Roux serum does not act on the kidneys, as do other serums; when it is used albuminuria is not so often encountered. As the children who are brought to the Civic Hospital are generally serious cases, I give at once the maximum dose, 1,000 units of the Mulford serum corresponding to 20 cc. of the Roux serum. Three years ago I had with the Roux serum some eruptions, but never of this intensity; since then the eruptions have been rare. The presence of eruptions and renal troubles seem to me to depend on microbial associations in diphtheria."

THE PRESCRIPTION

Therapeutic Cullings.

HOARSENESS.—For hoarseness in singers and speakers Botey recommends the following:

R Cocain. hydrochlor., gr. xv.
Strich sulph., gr. $\frac{3}{4}$.
Aq. dest., $\frac{3}{4}$ iij.

Spray throat.

And:

R Cocain. hydrochlor., gr. $\frac{3}{4}$.
Tinct. aconiti, π x.
White sugar and marshmallow,
q. s.

Pt. pastillas No. lxxx. Sig. To dissolve in the mouth.—*Gaillard's Medical Monthly*.

GRIPPE.—In the *Revue and Therapeutic Medico-Chirurgical* the following treatment for this disease is recommended:

Absolute and prolonged rest in bed until after all fever has disappeared and the principal symptoms have been ameliorated, notably pulmonary manifestations; an exclusive liquid diet, consisting of milk, coffee, mild stimulants, and hot drinks. The coffee is useful as a diuretic and to antagonize nervous depression. Care should be taken to maintain diuresis by this means. It is well to resort to antisepsis of the respiratory passages by gargling with some mild antiseptic gargle, and by spraying out the nose with a spray of liquid alboline with menthol in the proportion of three to six grains to the ounce. It is well to begin the treatment by a mild calomel purge. Where the symptoms are chiefly fever, great nervous depression, sore throat, hoarseness, and other manifestations of respiratory difficulty, is believed that quinine is the specific remedy, the hydrochlorate being preferred, and being given in the dose of ten to fi-

teen grains. Such a dose may be given three times in twenty-four hours, in cachets preferably. Should the stomach be intolerant, the hydrochlorate of quinine may be given by the rectum, dissolved in the proper quantity of hot water, or suppositories of hydrochlorate of quinine may be used. Antipyrin seems to be of value in combating fever and quieting pain, but is often a dangerous remedy in old persons. If the temperature is very high, warm baths, continued for fifteen or twenty minutes, are advisable. To combat the headache, ammonol may be used with the very best possible results. To overcome the evidences of congestion in the pulmonary mucous membranes, from ten to fifteen grains of chloride of ammonium and five to ten grains of Dover's powder may be given in the course of the day. To overcome cough and produce sleep, opium, morphine, or codeine may be used.—*Public Health Journal*.

BRONCHIAL CATARRH OF MEASLES.

R Liq. potass. citrat., $\frac{3}{4}$ iss.

Tinct. opii camph., $\frac{3}{4}$ iij.

Syr. ipecac, 3 j.

Syr. acaciæ, $\frac{3}{4}$ ss.

Aq., q. s. ad $\frac{3}{4}$ iij.

M. Sig. A dessertspoonful every two hours for a child of five years.—*Stephens, Med. Rec.*

THE IMPORTANCE OF CLEANLINESS IN THE TREATMENT OF GONORRHEA.—Professor Tarsar, of Berlin, believes that epididymitis, which frequently occurs as a complication of gonorrhea, is always due to secondary infection—the result of want of cleanliness on the part of the patient. He states that the injections have usually very little antiseptic power, and, as a rule, the patients never disinfect their hands and syringe be-

fore using an injection. Professor Tarsar has never known a case of epididymitis to occur in gonorrhea not treated by injections.—*Progress Med. Science.*

DIURETIC IN CHRONIC INTERSTITIAL NEPHRITIS.—

R Ferri citratis, 3 ij-3 ij.
Potassi citratis, 3 v-3 j.
Syr. limonis, 3 ij.
Aq., q. s. ad 3 viij.

Sig. Take a dessertspoonful before each meal, well diluted.—*Danforth, Med. Rec.*

EXOPTHALMIC GOITRE.—Symptoms of exophthalmic goitre are believed to show a marked preference for the right side of the body, especially in the early stages of the disease. Fitzgerald, of Dublin, who has attempted to explain this preference, believed the tachycardia to be also a right-sided symptom, because the right vagus is probably more concerned with the inhibition of the heart than the left, and also because the heart "soon after its appearance in the embryo projects to the right side, where it comes into relationship with the corresponding vagus."—*Miller, Medical Record.*

TRIGEMINAL NEURALGIA. — The *Wiener medicinische Presse (Klinisch-therapeutische Wochenschrift)* attributes the following formula to Hirschkrön:

R Phenacetine,
Antipyrine, aa gr. 45.
Quinine sulphate, gr. xv.

M. Divide into six powders. One or two to be taken daily.—*N. Y. Med. Jour.*

FACIAL PARALYSIS CURED BY SALICYLATE OF SODA.—Catrin (*La Presse Med.*) mentions a case of paralysis of the seventh cerebral nerve. The patient presented the following symptoms: Paralysis of the muscles of the face, diminution of the salivary secretion, disturbances of hearing and taste, and deviation of the eye downward when attempts were made to close it. Thinking that the trouble was of a rheumatic origin Catrin put his patient upon salicylate of soda, 30 grains per day, and this dose was gradually increased

until 60 grains per day were taken. This was continued for two weeks and then was gradually diminished. Altogether the patient took the drug three weeks. On the sixth day of treatment sensation began to return. In two weeks the patient could completely close his eyes and all disturbances of sensation were at an end. In three weeks there was no longer any trace of the trouble.—*Medical News.*

PRURITUS OF THE VULVA.—In cases that are not parasitic, says the *Independence Medicale*, M. Mussy advises the following application:

R Finely powd. starch, gr. 300.
Bismuth subnit.,
Potass. brom., aa gr. xv.
Calomel, gr. viij.
Powd. belladon., gr. iij.

M. To be applied twice a day. It is said to give almost instant relief. *Med. Prog.*

THERAPEUTIC FASTING IN TYPHOID FEVER.—Dr. Adolph Koenig (*Philadelphia Medical Journal*) summarizes the following points in favor of fasting in typhoid fever: (1) To reduce to a minimum the gas and toxin formations of the putrefactive bacteria. (2) To increase the resisting power of the patient for the bacillus typhosus. (3) To favor the ease and comfort of the patient. (4) To counteract the tendency towards diarrhoea. (5) To prevent as far as possible the third stage or that of mixed infection of the disease.—*Medical Record.*

PHTHISIS. — Goldmann (*Riforma medica*) recommends:

R Carbonate of guaiacol,
Sulphichthyolate of ammonium, aa gr. 225.
Pure glycerine, m 600.
Peppermint aq., m 150.

M. Twenty to thirty drops to be taken daily.—*N. Y. Med. Rec.*

OIL OF WINTERGREEN IN THE TREATMENT OF CHOREA.—According to Luigi (*Riforma medica; Gazette hebdomadaire de médecine et de chirurgie*) Professor Bozzolo, who introduced oil of wintergreen as a remedy for rheumatism, has demonstrated also its antipyretic action in erysipelas and scarlet fever and its antiseptic vir-

tues in urinary and pulmonary diseases. In Bozzolo's clinic it is now looked upon as the most available of the anti-rheumatics in the treatment of chorea in children. The oil of gaultheria, combined with its own weight of vaseline, is employed locally over painful joints, and not only ameliorates the pain, but also benefits the chorea.—*Kansas City Medical Record*.

CHRONIC CONJUNCTIVITIS.—

- ℞ Hazelini, ℥ iv.
Aq. carui, ℥ viij.
- ℞ Acidi tannici, gr. vi-xij.
Sodæ biboratis, 3 iij.
Glycerini, 3 vj.
Aq. camphoræ, q. s. ad ℥ xij.
- ℞ Tinct. myrrhæ, 3 ij.
Aq. dest., ℥ xij.
- ℞ Aluminis, gr. x-xx.
Aq. rosæ, ℥ xij.
- ℞ Ext. cinchonæ flavæ liq., ℥ 48.
Acidi hydrocyanici dil., ℥ xv.
Glycerini, 3 vj.
Aq. dest., q. s. ad ℥ vij.
- ℞ Ichthyol, 3 j.
Aq. sambuci,
Aq. dest., aa ℥ vj.

Berry, *Edinburgh Med. Jour.*

BORIC ACID INTOXICATION.—R. B. Wild, after citing a number of cases, including some of his own, distinguishes two forms of intoxication from boric acid—one in which a large quantity of the drug is rapidly absorbed from the alimentary canal, from a serous or other cavity, or from an extensive raw surface; in these cases vomiting and diarrhea, general depression, and partial paralysis of the nervous and muscular systems occur, and may cause death. A rash is noted in many instances, especially when the patient recovered or lived some days after the absorption of the drug. The other class of cases results from the administration of boric acid or borax in comparatively small doses for long periods, and the symptoms appear at a variable time after the commencement of the drug. In some of these cases it is mentioned that the kidneys were diseased, and the author gives as a possible reason for the immunity to the injurious effects of boric acid its very rapid elimination by healthy kidneys.

Furthermore, it is possible that cases of intoxication occur more frequently than is at present recognized. Boric acid may unwittingly be taken in food and cause a toxic skin eruption which may be mistaken for eczema, psoriasis, or exfoliative dermatitis.

It may be noted that a 1:500 solution corresponds to a 17.5 gr. per pint of the acid, a very large dose for an infant on milk diet and one likely in some cases to produce disturbance of the alimentary canal. It should also be ascertained that the milk ordered in cases of kidney disease is free from excess of boric acid or borax. The use of boric acid or the borates in surgery and their internal administration ought to be carefully guarded in patients with diseased kidneys, and immediately discontinued on the appearance of dermatitis or other toxic symptoms. In suspected cases examination of the urine may afford valuable evidence of the presence of the drug. *The Lancet*.

ATONIC DYSPEPSIA.—

- ℞ Bismuth subnit., gr. 90.
Pepsin, gr. 90.
Strychnine sulph., gr. i.
Orexine tannate, 3 j.
Comp. tinct. cardam, to make fl. ℥ iv.

A teaspoonful three times daily in water.—*Merck's Archives*.

THE DANGERS OF FLY BLISTERS.—M. Mathieu reports the history of a young man, who began to complain of severe cephalalgia accompanied by profound lassitude; there supervened persistent nausea and finally vomiting. Six vesicatories were placed over the boy's epigastrium; by the end of this treatment the urine was found to contain 25 centigrammes of albumin per litre; later on this was increased to 5 grammes. Mathieu diagnosed uremia from renal lesions caused by cantharides poisoning; the patient died during an attack of coma. Insidious Bright's, manifested only through indefinite gastric symptoms, is to be met with not infrequently, and a condition of constant nausea demands attention in suspicious cases. As far as treatment of such cases is concerned, we

must suppress the alimentary intoxication, secure intestinal antiseptics, purge the digestive tract, order a suitable diet—all these measures becoming imperative to prevent the occurrence of serious outbreaks.—*Boston Medical and Surgical Journal*.

CORYZA.—In the *Revue de Thérapeutique Médico-Chirurgicale*, Galois is credited with giving the following treatment in coryza. As abortive treatment frequent inhalation of the vapor of tincture of iodine, cologne water or chloroform, or the following prescription:

- ℞ Pure carbolic acid,
Ammoniac, aa 3 j.
Alcohol (90 per cent.), 3 iiss.
Distilled aq., 3 ss.

Every half hour place a few drops on a handkerchief and inhale.

Or, on the first day, every two or three hours the following powder may be snuffed up the nose:

- ℞ Hydrochlor. of cocaine, gr. ij.
Boric acid,
Salol, aa 3 iij.
Menthol, gr. ij.

Or,

- ℞ Salol, 3 j.
Boric acid, 3 vj.
Tannin,
Salicylic acid, aa gr. xv.

To allay irritation of nasal orifices the following salve may be used:

- ℞ Subnit. of bismuth,
Vaseline and lanolin, each, aa 3 j.

As a palliative treatment the congestion may be relieved by atomization into the nostrils of the following solution:

- ℞ Hydrochlor. of cocaine, gr. xv.
Distilled aq., 3 iij.

Therapeutic Gazette.

ECLAMPSIA.—During the attack itself use chloroform. As soon as the attack passes off give hypodermically fifteen drops of the fluid extract of veratrum viride, and a drachm of chloral in solution by enema. Place upon the tongue two drops of croton oil diluted with a little sweet oil. Induce diaphoresis by hot packs and extra bedclothing. Inject by gravity under the breast a pint or more of decinormal salt solution, or several quarts of the solution by enema. If convulsions recur, repeat the vera-

trum in five-drop doses if the pulse is quick and strong. If the face is congested and the pulse full employ venesection enough to reduce the pulse. The chloral may be repeated during the attack two or three times. Use stimulants if the pulse is weak and rapid. If the convulsions cease and the patient is in a stupor, but can be aroused enough to swallow, give dessertspoonfuls of concentrated solution of Epsom salts every fifteen or thirty minutes until free catharsis takes place. These condensed directions should be carried in the pocket case of every obstetrician.—*Hirst, Medical Record*.

EXPECTORANT MIXTURE FOR CHRONIC BRONCHITIS.—

- ℞ Chloride of ammonium, 3 iss.
Tinct. hyoscyamus, 3 iv.
Wine of ipecac, 3 iss.
Syr. hypophosphites comp.
(Fellows'), 3 j.
Aq., ad 3 iv.

Sig. Two teaspoonfuls every four hours.—*The North American Medical Review*.

CERUMEN IN THE EARS.—It was recently stated in the *Cincinnati Lancet-Clinic* that Dr. Ricci, of Turin, had ascertained that peroxide of hydrogen disintegrates cerumen in the ears, which solution he uses therapeutically for its removal. But such treatment originated in America, and credit must be given to Dr. A. S. Tucker, who published a short account of the usefulness of Marchand's solution of peroxide of hydrogen in this direction in the *California Medical Journal* for June, 1892. A good many practitioners have used H_2O_2 for the removal of wax in the ears ever since—preferably hydrozone, which is a double-strong H_2O_2 —and have yet to see a case of failure.—*Blech, Cincinnati Lancet-Clinic*.

GONORRHEA, ACUTE STAGE.—

- ℞ Protargol, gr. viij.
Glycerine, 3 j.
Aq., 3 viij

Make a paste of glycerine and protargol, and add the water. Inject three times daily, holding in the urethra, ten minutes each time.—*Southern Med. Jour.*

STIMULATING EXPECTORANT IN BRONCHO-PNEUMONIA.—

R Ammonium carbonate, gr. xxiv.
 Syr. tolu, fl. 3 vj.
 Brandy, fl. 3 iij.
 Syr. senega, fl. 3 iiiss.
 Syr. acacia, to make fl. 3 iij.

One teaspoonful every two hours for a child two or three years of age.
Goodhart and Starr, Medical News.

HOW TO PREVENT COUGHING.—It is "going the rounds" that a doctor, by the promise of rewards and punishments, succeeded in inducing children in a hospital ward to simply hold their breath when tempted to cough, and in a little while he was surprised to see how some of the children entirely recovered from the habit. Constant coughing is precisely like scratching a wound on the body; so long as it is done the wound will not heal. Let a person, when tempted to cough, draw a long breath and hold it until it warms and soothes every air cell, and some benefit will soon be received from this process.—*Virginia Medical Semi-Monthly.*

GOUTY ARTHRITIS.—In the acute form rest is recommended, with local applications for the relief of pain. The following has been extensively used:

R Atropinæ, gr. j.
 Morphine, gr. viij.
 Aq., 3 j.

A piece of lint soaked with this lotion is laid over the inflamed point, covered with oiled silk and absorbent cotton. The constitutional treatment for gout must be carried out.—*MacDonald, Med. Rec.*

COPPER-SULPHATE ENEMAS FOR DYS-ENTERY.—Acute dysentery has been treated with enemas containing sulphate of copper, under the direction of Sandwith, quite successfully. The enemas were made fresh every day, and consisted of sulphate of copper, 1 gm. (15 gr.); tincture of opium, 15 drops; starch, 30 gm. (1 oz.), and water, 250 cc. (8 fl. oz.). The injection at times caused pain, but this was combated by the introduction of a cocaine suppository. Injections were also daily made of boric acid solution and starch, and bismuth sal-

icylate administered in 1 gm. (15 gr.) doses every four hours. The patient was kept in bed, and the abdomen kept warm by being well wrapped in flannels. The diet consisted of boiled milk, rice-water and seltzer water with a little brandy. Under the influence of this medication patients rapidly improved and were cured.—*Sem. Med.*

ALOPECIA.—The following is recommended by Dr. Shoemaker:

R Tinct. capsici, 3 iv.
 Glycerini, 3 ij.
 Tinct. cantharidis, 3 iij.
 Tinct. saponariæ quil., 3 j.
 Spir. rosmarini, 3 iss.
 Aq. rosæ, q. s. ad 3 viij.

M. Sig. Drop on the hair night and morning.—*Med. Progress.*

CINNAMON AS A REMEDY FOR CANCER.—A recent number of the *Ophthalmic Review*, London, contains a report of a case of malignant tumor of the orbit by Dr. C. G. Lee, in which partial removal was followed by a regrowth, and, after the exhibition of a decoction of cinnamon as a medicine, there was complete recovery. We are inclined to think it a mistake to publish such professional novelties, until sufficient data are collected to warrant a general experimentation with the proposed remedy. Would it not be well to continue the trial of "clover tea" a little longer?—*The St. Louis Clinique.*

OINTMENT FOR INFANTILE IMPETIGO OF THE HEAD AND FACE.—The *Riforma medica* ascribes the following formula to Kistler:

R Salicylic acid, parts ij.
 Bismuth subnitrate, parts 40.
 Rose ointment, parts 100.
 Powd. starch, parts xv.

M.—*N. Y. Med. Jour.*

CATARRH OF THE EUSTACHIAN TUBE AND MIDDLE EAR.—Dr. Tschouprina (*Revue de Thérapeutique*) reports two rebellious cases of catarrh of the middle ear, in which considerable relief was obtained by intratympanic injections of bicarbonate of sodium and chloride of sodium. The author adds that this treatment gives good results after insufflation has failed. He employs a lukewarm solution of

a mixture of equal parts of these ingredients, injecting every day from fifty centigrams to one gram of the solution. He uses a Pravaz syringe fitted with an ordinary auricular catheter introduced into the Eustachian tube.—*Medical Record*.

FOR PERNICIOUS AND CHRONIC MALARIA.—Dr. C. M. Watson recommends the following prescription:

℞ Quininæ sulphatis, 3 ij.
Acidi sulphurici aromatici,
3 iv.

Tinct. ferri chloridi, 3 ij.

Liq. potassii arsenitis, 3 iv.

Strychninæ sulphatis, gr. j.

Elixir aurantiæ, q. s. ft. 3 viij.

Sig. Shake and give a teaspoonful in a wineglassful of water before meals and at bedtime if necessary.
Memphis Lancet.

THE ADMINISTRATION OF ANTITOXIN BY THE RECTUM.—Dr. O'Connor, of Sowestoft, administers diphtheritic antitoxin by the rectum, and believes that absorption is both rapid and complete. He claims markedly good results, while at the same time there were very few complications.
Progress of Medical Science.

CHRONIC BRONCHITIS.—

℞ Apomorph. hydrochlor, gr. ss.
Syr. pruni virg., 3 ij.
Syr. picis liquidæ, 3 iv.

M. Sig. Tablespoonful three times a day.—*Murrell*.

Or:

℞ Acid. carbol., gr. xxv.
Tinct. opii camph., 3 iij.

M. Sig. A drachm added to one-half pint of hot water in the inhaler; use three times a day.—*Davis, Med. Rec.*

EXOPHTHALMIC GOITRE.—Dr. Frank Oliphant divides the method of treatment into five heads: (1) The general hygienic treatment, which consists of rest in bed for a certain period of time, and the regulation of the diet embracing non-stimulating and easily digestible foods; (2) of the drugs, belladonna in large doses does the most good, by restraining the action of the heart, and by decreasing (probably) the secretory activity of the gland. Ung. hydr. iod. externally tends to decrease the

size of the goitre; digitalis is effective as a cardiac tonic. Phosphate of soda, so highly praised by some, has been attended with no results in the author's hands; (3) electricity, so much relied upon formerly, has now given place to more effective means; (4) the author failed to obtain any results from the administration of either the thymus or the thyroid extract; the first one is probably somewhat more efficacious. Pancreatic emulsion, suprarenal gland and spleen have all been used with varying success; (5) operative treatment by Kocher consists in ligature of the thyroid arteries; other methods are: removal, by excision, of half or more of the gland, and exothyreopecty—the laying bare and bringing out of the gland, leaving it in this position, the usual result being thrombosis of the veins and shrivelling up of the gland. The most recent operation is that by Jaboulay, which consists in the division of the cervical sympathetic. The mortality in all the operative procedures being rather high—fully 12 per cent.—the tendency is making itself felt to resort to operative interference only after medicinal means have been exhausted and proved futile.—*The Birmingham Medical Review*.

SULPHIDE OF CALCIUM.—I have used the following for some years with very satisfactory results in cases of eruptions on the body; and all manner of breaking out tending to inflammation and suppuration of the parts:

℞ Sulphide calcium, gr. ss.
Rochelle salts, gr. x-xv.
Epsom salts, gr. x-xv.
Water, 3 ij.

Give three times a day after meals. To children give half the quantity. If the dose physics, give less.—*Waring, Ex.*

APOMORPHINE IN ACUTE ALCOHOLIC DELIRIUM.—Tompkins calls attention to a new use to which he has several times successfully put apomorphine hydrochlorate. He says that in cases of acute alcoholism with delirium it "gets in its work in minutes, whereas it takes hours for bromides, chloral, and the like to have effect."

He pronounces it far superior to morphine in such cases, as it eliminates the poison, while the morphine dries up the secretions. He says, however, that its use is generally contraindicated in genuine cases of delirium tremens, because there is usually weakness of the heart. He cites one of his cases in which he was called about midnight to see a man in convulsions. The knowledge of the man's habits and the odor of liquor on his breath made the diagnosis easy, so he at once injected hypodermically $\frac{1}{4}$ gr. of apomorphine hydrochlorate. In four minutes free emesis occurred, rigidity changed to relaxation, and excitement to sleep. *Medical Record.*

ENLARGED GLANDS.—Where surgical interference is inadvisable, use the following ointment night and morning:

℞ Ichthyol, 3 j.
Ungt. hydrargyri, .
Ungt. belladonnæ, aa 3 j.
Nugent. petrolei, 3 vj.

M.—*Keen, Ex.*

USES OF APOMORPHINE.—Dr. G. B. Malone (*Memphis Medical Monthly*) reports the efficient use of apomorphine in spasmodic asthma, the dose being one-twentieth of a grain *per os*; in hysterical convulsions, one-tenth of a grain hypodermically; in the convulsions of childhood, one-twentieth of a grain being given to a child two years and a half old; and finally, in puerperal eclampsia, using an initial dose of one-tenth of a grain.—*Medical Record.*

CAPILLARY BRONCHITIS.—

℞ Sol. ammonium acetate, fl. 3 iv.
Syr. ipecac, fl. 3 ij.
Syr. wild cherry, fl. 3 iv.
Morphine sulphate, gr. iij.
Distilled aq., to make fl. 3 iv.

Teaspoonful every two hours.—*Merck's Archives.*

EGG ALBUMEN AS A REMEDY IN SKIN DISEASE.—S. Lewith (*Archiv für Dermatologie und Syphilis Treatment*) has made trial of white of eggs in cases of much irritation of the skin and moderate exudation. It is applied as follows: The hands are thoroughly washed, an egg is

opened, and the [white] is separated from the yolk, and is well stirred up with the finger in a little glass. The affected part is then smeared by means of the finger with a thin layer. It forms a delicate, friable membrane, which covers the tissues beneath, and exerts on them a slight pressure. The itchiness is soon diminished or removed, and a pleasant coolness is felt. The treatment certainly has the merit of cheapness, for one egg is almost sufficient for an application to the skin of the whole body.—*N. Y. Medical Journal.*

ACUTE ANGINA OF INFANTS.—

℞ Acid. carbolic, gr. xv.

Glycerine, 3 i. 5.

Ol. thymi, gtt. ij.

Aq., 3 xvi.

M. Sig. Irrigate the pharynx.—*Southern Med. Jour.*

SODIUM CINNAMATE IN PULMONARY TUBERCULOSIS.—Alfred Mann, in a paper read before the New York Academy of Medicine, Section on Medicine, in January, especially considered the intravenous injection of aqueous solutions of sodium cinnamate. The first change produced was an increase in the number of white corpuscles in the blood. This was noticeable within a few hours after injection. The maximum was reached in twenty-four hours and nearly disappeared in forty-eight hours. The capillaries of the affected areas became dilated and crowded with leucocytes. These leucocytes gathered about the tuberculous foci, forming a dense wall around the infected areas.

After a month or two new blood-vessels sprang up, granulations began to form, and as the necrotic material composing the tuberculous mass was absorbed, granulation tissue took its place. Finally, the diseased area was replaced by a connective tissue scar.

The whole process may be summed up by saying the treatment substituted an active inflammation, the result of which was cicatrization. Small cavities were entirely obliterated, and even large ones were surrounded by dense connective tissue, with a smooth, dry lining of the same tissue. Fevers and night sweats in

favorable cases disappeared in two or three weeks, and there was a general feeling of well-being and increased strength. One of the earliest signs of improvement was a change in the expectoration of mucopurulent or mucoid, and a diminution in its quantity. The treatment usually extended over three months, but from five months to a year might be required in some cases.

The original preparation used was an emulsion of yolk of egg, containing water and cinnamic acid ground up finely and rendered alkaline by sodium carbonate, which was added gradually in several small portions. It was found, however, that the injection of the acid mixture caused chills. The fineness of the emulsion was a matter of great importance. Subsequently aqueous solutions of pure sodium cinnamate were used in strengths of 1 and 5 per cent.

It is absolutely necessary to begin with 1 or 2 min. only of a 1 per cent. solution, especially in severe or hemorrhagic cases or when the patient is very weak. The dose is increased gradually from $\frac{1}{16}$ gr. to $\frac{1}{4}$ or $\frac{1}{2}$ gr. The latter dose should seldom be exceeded. The injections are repeated at intervals of forty-eight hours usually, but for convenience they may be given two or three times a week in somewhat larger doses.—*Merck's Archives*.

OIL OF WINTERGREEN IN RHEUMATISM.—

R Oil wintergreen, fl. 3 iv.
Alcohol,
Syrup, aa fl. $\frac{3}{4}$ iv.

Sig. One teaspoonful in vichy three times a day.—*Medical Record*.

APPENDICULAR INFLAMMATION.—Dr. Herman B. Allyn (*Therapeutic Gazette*) says:

"But even the most enthusiastic advocates of operation decline to operate in certain cases. I very well remember on one occasion calling a surgeon in consultation over a case of appendicitis. There was extensive tympanites, but slight fever, and the pulse was under 100. The aspect of the patient was, however, bad, and the surgeon declined to operate then, believing that if the abdomen were opened the patient would go into

collapse and die on the table. He advised the use of Epsom salt until the bowels were freely moved. This suggestion was carried out, and in twelve hours the patient was so much better that it was decided to wait still longer before operation. To make the story short the patient fully recovered, and then declined operation, until another attack made him again change his mind. It may appear to others, as it seemed to me, that if the moderate use of salines will rescue a patient who is deemed so far gone by a surgeon that he would not survive an operation, it should also be a good treatment for milder cases in which the question of operation is never urgent."—*New York Medical Journal*.

IN LIVER DISORDERS OF MALARIAL ORIGIN.—

R Strychninæ arsenatis, o. 3.
Aq. sterilisat, q. s. ad 100.

Sig. Inject one syringeful every second day.

Alternate with:

R Quininæ lactat., 20.
Antipyrin, 20.
Aq. sterilisat, q. s. ad 100.

Sig. One syringeful injected every second day.—*Roussel, Med. Rec.*

TREATMENT OF LUPUS BY THYROID COLLOID.—Dr. Raymond Crawford (*Therapeutic Gazette*) reports that at a recent meeting of the Clinical Society of London, Mr. Pearse Gould showed a case of lupus of the whole face treated by thyroid colloid with the most striking results. In three weeks from commencing the treatment the whole ulcerated surface had completely healed, and the scar tissue was undergoing transformation from a hard, hidebound state into a soft, pliable condition. Incidentally Dr. Pringle alluded to a series of cases treated by thyroid colloid; he was of opinion that the thyroid colloid was by far the most efficacious preparation of the thyroid gland that is now used medicinally. He was able to point to remarkable results in a considerable number of cases, but his experience of the after history led him to believe that the cure was seldom if ever permanent, as foci of lupoid tissue always remained behind to light up the dis-

ease afresh. It was not made quite clear whether Pearce Gould's was a true case of lupus granuloma, or whether it belonged rather to the category of scrofuloderma. Dermatologists seem to agree that the thyreoid colloid, like serum preparations, is much more efficacious in cases of scrofuloderma than in cases of true lupus granuloma.—*New York Medical Journal*.

PRURITUS.—

- ℞ Menthol, 3 j.
Cerat. simp., ℥ ij.
Ol. amygdalæ dulc., ℥ j.
Ac. carbolic, 3 j.
Pulv. zinc. oxid., ℥ ij.

After cleansing the parts, apply night and morning.—*Kelsey, Philadelphia Medical Journal*.

TEST FOR IODOFORM INTOXICATION. The following means (*Buffalo Medical and Surgical Journal*) may be resorted to for demonstrating in time a threatened iodoform intoxication, a condition which is not rare in surgical and gynecological practice. A test is made of the urine to note the quantity of iodine which is eliminated by it. A small pinch of powdered calomel is placed upon a white saucer and then a few drops of the urine to be examined are dropped upon it; a mixture of urine and calomel is then made with a glass rod. If the urine contains a notable amount of iodine there is produced a well marked yellow discoloration, which should indicate that the iodoform is being absorbed in sufficient quantity to produce danger.—*Rev'd in Amer. J. Surg. and Gyn.*

FLATULENCE IN CHILDREN.—

- ℞ Sodii sulphocarb., gr. iv-vij.
Syr. aurantii, m 40.
Aq. menthæ pip., q. s. ad ℥ j.
M. Sig. One teaspoonful three times a day for two days.—*Freyberger, Ex.*

INTESTINAL OBSTRUCTION TREATED BY ELECTRICITY.—Mingour and Ber-gonie (*Edin. Med. Jour.; Post-Graduate*) record the case of a child five and a half years old, subject to habitual constipation, which eventually developed signs and symptoms of

intestinal obstruction with fecal accumulation. Purges and enemata were given for seven days without result. Patient wasted and collapsed. An inguinal hernia, which had been present four years, was found normal and not strangulated. Recourse to electricity was had, one pole being introduced into the rectum. The current was gradually raised, and after three minutes with one or two interruptions, a mass of fecal matter, amounting to about three pints, followed, leading to the immediate recovery of the patient. One subsequent attack has necessitated electrical interference.—*The Medical Times*.

LARYNGO-BRONCHIAL IRRITATION OF INFLUENZA.—

- ℞ Codeinæ sulph., gr. iv.
Ammonii chloridi, 3 v.
Syr. pruni virg., ℥ ij.
Spir. junip. comp., q. s. ad ℥ iv.
M. Sig. A teaspoonful every two or three hours.—*Anders, The Medical Fortnightly*.

SALICYLIC ACID IN PNEUMONIA.—Backer lauds salicylic acid in the treatment of pneumonia. He says, it loosens the fibrinous coagulum and causes the expectoration to lose its viscosity. He considers it a true abortive of pneumonia. To children 0.1 grm. (1½ gr.) may be given every hour or every two hours. To adults 0.5 grm. (8 gr.) every two or three hours. It is to be dissolved in a small quantity of hot sugar-water, milk or chocolate. It is contra-indicated in cardiac affections and where there is collapse.—*New York Medical Journal*.

NEURALGIA.—

- ℞ Acetanilidi, gr. xx.
Camphor monobromate, gr. v.
M. Ft. in pil. No. x. Sig. One every two hours. Not to be used if there is reason to believe that marked renal congestion or irritation is present.—*Ex.*

BURNS.—Dr. Dakhyle (*Le Progrès Médical*) remarks that two methods of treatment for burns may be recommended, the antiseptic and the keratoplastic, which hastens cicatrization by topical applications. Of all keratoplastic topics, picric acid is the

best. It has no toxic effects upon children and is inoffensive to adults. Its application is recommended from superficial burns to those of the third degree; it is contraindicated in deep, old, or suppurating burns, and in very young children. The technique of applying picric acid ought to be followed minutely. It consists of antiseptic cleansing of the burn in a picric acid bath of one per cent., with a careful preservation of the epidermis. This washing is to be repeated, taking all possible care to avoid raising the epidermis. When burns are very superficial, remarkable cures have been effected by painting with ether or alcohol saturated with picric acid. In old or suppurating burns one can use picric acid and iodoform, thylol, and ichthyol. Picric acid may also be applied to burns occasioned by caustics or vitriol.—*Medical Record*.

PHTHISICAL DIARRHŒA.—De Renzi (*Riforma medica*) recommends:

℞ Iodoform, gr. 30.

Tannin, gr. 60.

M. Divide into ten powders. From two to four to be taken daily.—*New York Medical Journal*.

BLEEDING FROM THE NOSE. HOW TO CHECK IT.—Epistaxis, or bleeding from the nose, does not, as a rule, require other than simple domestic treatment. When hæmorrhage of this kind seems to be spontaneous, and there is no apparent exciting cause, it is best to let it alone, as it may be an effort of nature to get rid of an over-supply of blood, and thus relieve some internal organ from over distention and congestion. An attack of apoplexy has doubtless often been prevented through this safety valve which nature has provided. When it becomes necessary to check hæmorrhage from the nose, one of the several following methods may be tried: If blood flows from the nose in a continuous stream, or when the loss has become considerable by continued and constant dropping, it may be checked by applying a cold douche to the face or back part of the neck—an ice pack will answer the same purpose. The snuffing up the nostrils of cold water containing salt, tannin or alum is very

good. Another method is to take a long strip of lint or old linen, soaked in water containing either of the above ingredients, and gently introduce one end of the strip into the nostril with the aid of a pencil or penholder; the strip should be pushed in until the whole nostril is packed; this serves to act as a plug, which, with the astringent properties of the preparation used, will, in nearly every instance, stop further hæmorrhage. Should any of these not prove sufficient, it is quite evident that the bleeding comes from the upper or back part of the nose, and in that case the services of a physician are required. Frequent attacks of epistaxis denote a low, debilitated condition of the system, and require medicinal treatment.—*Health*.

TO REMOVE THE ODOR OF IODOFORM.—Edwin Ricketts, M. D. (*Lancet-Clinic*), says: "To do away with the 'smell' of iodoform that comes to the hands of the surgeon for handling it, I find that to rub on, after use of soap and water, a teaspoonful of vinegar (found in every household) does away, promptly, with the very disagreeable odor."—*Med. Stand*.

DIURETIC IN THE CARDIAC HYDROPS OF CHILDREN.—

℞ Uropherini salicyl, 5.

Vanillin, 0.001.

Mucil. acaciæ,

Syr. simplicis, aa 15.

Aquæ font, 120.

M. Sig. A teaspoonful three or four times daily.—*Escherich, Medical Record*.

THE RADICAL TREATMENT OF CARBUNCLE is advocated by Dr. Carl Beck, professor of surgery in the New York Clinical School of Medicine (*Clinical Record*). The plan he follows is this: After local or general anæsthesia and thorough antiseptic applications, the infiltrated mass is caught by a Mazeux forceps. An incision is made around the margin of the reddened area and carried down to the deeper tissues. The whole mass is rapidly severed from the underlying tissues. Hemorrhage, which is not excessive, can be checked by packing iodoform gauze. A

gauze dressing, saturated with a strong solution of bichloride of mercury is employed until the wound granulates. The immediate effect of this method is simply surprising. The general disturbance, the pain, fever, and delirious state of the patient disappear at once. Even if performed without an anæsthetic, this method is less cruel than the method of crucial incision, and the patient does not require any further operative interference, as when the latter method is employed.—*Louisville Medical Monthly*.

ICHTHYOL IN HYPERIDROSIS.—In the *Archivos de la Policlinica* we find the following formula for an ointment:

℞ Ichthyol, parts xxv.
Water, parts xv.
Lanolin, parts xxv.

M.—*New York Medical Journal*.

BRONCHITIS.—A full dose of Dover's powder will frequently abort an attack.—*Charbonneau*.

Opium should be freely used in the form of Dover's powder. No remedy can take its place.—*Osler*.

The following therapeutic results are from the use of opium in full doses: Reduction of irritability, congestion, or inflammatory activity. Alteration in the character and limitation of the amount of the secretion. Increase in the general comfort by relief of pain and soreness, and removal of cough and incidental insomnia. Speedy and permanent cure of eighty per cent. of the cases. *English, Med. Rec.*

PAINLESS VESICATORY.—

℞ Menthol,
Chloral hydrat., aa part j.
Spermaceti, parts v.
Ol. theobrom., parts ij.

M. Sig. Spread upon linen and apply.—*Louisville Med. Mon.*

THE IODIDES IN CHRONIC PARENCHYMATOUS NEPHRITIS.—After clinical observation during the past eighteen years of the benefits of small doses of iodides continued for months or even years, Prof. Leonard Weber, 25 West 46 Street, New York, (*Post-Graduate*) is convinced that these salts have "power to retard, modify and improve subacute and

chronic inflammatory processes concerning the connective tissue of parenchymatous organs like the kidneys, the liver, the lungs, and particularly sclerotic diseases of the arterial vessels." This salutary effect he attributes to direct inhibition of connective tissue proliferation and subsequent disintegration and fatty metamorphosis of infiltrated corpuscular elements and the removal of the same. In cases with syphilitic history it is well to give larger doses. The *Denver Medical Times* says that the elixir six iodides is probably the best preparation of its kind in the market.—*Kansas City Med. Record*.

OZÆNA.—

℞ Potassii iodidi, 0.5.
Iodi puri, 0.3.
Glycerini, 40.

M. Sig. Apply locally.—*Schrotter, Med. Record*.

ACETANILID IN THREATENED MIS-CARRIAGE AND HABITUAL ABORTION. According to Dr. Harnsberger (*La Sem. Méd.*) acetanilid is an antiabortifacient of the first order. In two doses of from one-half to one gram every four or two hours, or when necessary every hour, it stops all uterine contractions, even when more or less abundant metrorrhagia has already appeared. In habitual abortion it is administered in doses of from thirty to fifty centigrams every one to four hours for several successive days at a time corresponding to the menstrual period. Harnsberger has never had any evil results or seen any injury following this medication, aside from slight cyanosis, which otherwise was of no moment.—*Medical Record*.

FETID CHRONIC LARYNGITIS.—

℞ Potassii permanganatis, gr. ij.
Aquæ destillatæ, ʒ ij.

M. Sig. Use in atomizer several times daily.—*Sajous, Medical Record*.

TREATMENT OF NEURALGIA AND HEADACHE WITH AN ETHER SPRAY.—Hamm (*Therap. Monatshefte*) has revived an old method of treatment, the ether spray, and applied it to the relief of headaches and neuralgia with good results. The apparatus is one that can be had at any drug

store, and the expense is light. He has treated a large number of patients in this manner and has found the method to fail in only a single instance. Usually one application is sufficient to effect a cure. The ether is sprayed upon the most painful part until there shows a thin white layer of frost. The pain is relieved at once and usually does not recur. In mild cases it is not necessary to freeze the skin.—*North American Practitioner*.

NEURALGIA.—

℞ Acid. osmic, ctgrm. $\frac{1}{10}$.
Aq. dest., grm. 6.
Glycerini, grm. 4.

M. Sig. Inject $\frac{1}{100}$ ctgrm.—*Chaparro, Ex.*

CREOSOTE IN CONSTIPATION.—According to the *West London Medical Journal*, creosote may be administered in drop doses, twice daily, after breakfast and dinner, for constipation. It should not be prescribed in capsules or pearls, but it should be taken in milk, beer, wine, etc. After a few days the dose should be gradually increased to seven minims twice daily.—*Ex.*

A MIXTURE FOR BLENNORRHAGIC DYSURIA.—According to the *Progrès Medical* the following is Gerbert's formula:

℞ Sodium salicylate, gr. 150.
Ext. belladonna, gr. 5.
Water, gr. 2,930.
Tinct. bitter orange peel, gr. 75.

M. Sig. Tablespoonful every two or three hours.—*New York Medical Journal*.

CLINICAL INVESTIGATIONS ON THE ACTION AND USE OF HEROIN.—

Clinical investigations on the action and use of heroin. (*Therap. Monats.*) Heroin, in sixty cases on which it was tried, proved a prompt and certain agent for combating cough, and the irritation which induced the cough, also pains in the chest, and especially in catarrhal inflammation of the upper and lower respiratory tract, both in acute and chronic cases. It gave relief in cases of bronchitis sicca where codeine proved ineffective. It was likewise very efficient in relieving the cough

of pulmonary tuberculosis, failing in only four out of twenty-five cases. In three cases of asthma bronchiale was the action very apparent. It does not seem to be indicated as an agent for the relief of pain in general, and especially in pain of the abdominal organs. No unpleasant symptoms, as vomiting, etc., were observed save in one case, where a temporary attack of giddiness resulted. Dose, 0.005-0.01 to 0.02, three or four times a day in powder, with sugar. It can be used in aqueous solution with a few drops of dilute acetic acid.—*Floret, Dominion Med. Mon.*

RHINO-PHARYNGITIS.—The *Journal de médecine de Paris* recommends the following treatment of rhino-pharyngitis in children:

℞ Menthol, gr. j-iiij.
Olive oil, 3 iiss.

This mixture may be dropped in the nose. When the secretion is chronic and profuse, the following powder may be placed in the nasal cavities:

℞ Aristol
Lactose
Aceto-tartrate of aluminum,
aa. 3 j.

It is well to wash nasal mucous membrane once or twice a day with hot water containing boric acid, or salt or natural saline water. Where the glands are torpid and the secretion is tough and chronic, the following liquid may be applied to pharyngeal wall:

℞ Powdered iodine, gr. iiij.
Iodide of potassium, gr. xxx.
Glycerin, $\frac{3}{4}$ j.
Ess. peppermint, gtt. iv.
Therapeutic Gazette.

SALINE SOLUTIONS IN INFANTILE BRONCHO-PNEUMONIA.—Eleven cases of infantile broncho-pneumonia successfully treated by hæmatocatharsis, in all of which a 7% saline solution (at 98.5° F.) was employed. The writer injected daily under the skin of the abdomen or in the thigh under strict antisepsis 200 cubic centimetres at one time in children 3 years and over. Under that age the injections were 60 cubic centimetres three times a day. The blood-pressure is raised, diuresis is increased,

the whole organism, notably the nervous system, is powerfully stimulated; oxidation is increased, and symptoms are improved, where usual means fail. The contra-indications are weak heart, excessive obesity, and pulmonary tuberculosis. The injections should be given as early as possible in the case.—*Lemaire, Sem. Med.*

LACTOPHENIN IN CHOREA MINOR.
Use the following as sedative and antispasmodic for children of five to ten years:

℞ Lactophenin,
Quinine, hydrobromide, aa gr.
2¼.

M. One such powder to be taken three times a day.

For children of ten to fifteen years use:

℞ Lactophenin,
Quinine hydrobromide, aa gr.
12.

Cocoa butter, gr. 150.

M. Make a suppository and use at bedtime.—*Pediatrics.*

THE TREATMENT OF HEART DISEASE BY SALINE BATHS AND RESISTED MOVEMENTS—SCHOTT METHOD.—Dr. Charles Lyman Greene (*Journal of the American Medical Association*) writes as follows: Relative value of baths and movements: The effect of baths is more permanent than that of the movements, but both should be used, the movements in the morning and the baths at night.

Cases best adapted to treatment: It is admirably adapted to cases of incompensation of moderate severity where rest is not to be had, and to those severer cases in which rest and cardiac stimulants have proven useless or reached the limit of effect. The particular class of cases best adapted to treatment are the mitral cases, particularly those of regurgitation, even if very advanced, and all cases of very slight incompensation, in which marked arteriosclerosis and myocarditis are not present. In exophthalmic goitre, cases of functional irregularity, of neurasthenia, in all cases of anæmia, and in chronic rheumatism it is very useful.

Cases in which it has proven of little use: In the writer's hands aortic cases, whether stenosis or

regurgitation, have not as a whole yielded good results. No harm has been done, and many have improved, but the writer is not satisfied that the treatment is here of any decided value, and believes that simple rest and the resisted movements are much to be preferred.

Cases in which it is contraindicated: These are aneurism, marked arteriosclerosis, chronic myocarditis, and chronic Bright's disease; yet, while baths are in these cases distinctly dangerous and harmful, the movements may be decidedly beneficial.—*Medical Record.*

STERILIZATION OF DRINKING WATER.—Schumbare (*Riforma medica*) recommends to each quart of water the addition of three drops of the following solution:

℞ Bromine,
Bromide of potassium, aa gr.
300.

Water, m 1,500.

After five minutes neutralize with an equal quantity of solution of ammonia, nine per cent. A limpid, tasteless liquid is thus obtained. When the water is very impure and strongly calcareous, so much of the bromine solution is added as is necessary to impart a yellowish color, which persists for about half a minute.—*New York Medical Journal.*

THE MISUSE OF ERGOT IN HEMORRHAGE.—F. A. Packard, in the *University Medical Magazine*, advocates the discontinuance of the use of ergot (or any drug which increases arterial tension) in all forms of hemorrhage, except uterine. Many authorities agree with him in this opinion.

Hemorrhage being arrested by the formation of a clot, and the formation of the clot being favored by a sluggish blood stream, he argues that it is irrational to give any drug which increases vascular tension and so hastens the blood current. His experience in the use of ergot lends weight to his theory. For the treatment of medical hemorrhage, he advises the use of drugs which increase the coagulability of the blood, as calcium chlorid, and where the seat of hemorrhage is accessible to the direct action of remedies, he uses

drugs which by their local action favor clotting, as hamamelis in epistaxis, and vapor of turpentine in hæmophysis. In suitable cases he uses nitroglycerin, veratrum viride, the intermittent elastic ligature of the extremities and venesection. In hemorrhage from any cause, opium is a valuable drug, because it produces mental and physical rest, while its power of raising vascular tension can be overcome by the use of one of the vaso-dilators.—*Progress of Medical Science.*

SALICYLATED GELATIN FOR ECZEMA.
Schwimmer (*Wiener medizinische Presse; Journal de médecine de Paris*) gives the following:

- R Salicylic acid,
Glycerin, aa parts x.
Gelatin,
Water, aa parts xxx.

Dissolve by the aid of heat. The author recommends this application for vesicular eczema.—*Ex.*

QUININE TOPICALLY IN LEUCORRHEA.—W. Wright Hardwicke was led by accident to use quinine topically in several cases of simple leucorrhœa. In no instance did it fail nor was quinism produced. It may be used in the form of douche or pessary. The latter form was adopted as the better one, the drug having a better chance of closer and more continuous contact with the congested membrane. Three grains of the hydromate in a half-dram pessary, in combination with cacao-butter is used. One insertion a day is sufficient, a good result being very soon manifest.—*Lancet.*

DYSPEPSIA.—

- R Orexine tannate, 3 ij.
Whisky, fl. ʒ iij.
Tinct. calumba, fl. 3 ij.
Cinnamon water,
Glycerin, aa fl. 3 iv.

Teaspoonful before meals. Shake well.—*Merck's Archives.*

HOW TO MAKE A MUSTARD PLASTER.
Never place a cold mustard plaster on a patient. The shock is like a sudden plunge into cold water. Before you commence to mix the paste be sure you have all the necessary material at hand. First put a large

plate where it can get warm, not hot. Then stir the mustard and flour thoroughly together before you add the water, which should be tepid; stir in enough water to make a paste about the consistency of French mustard. Place your cloth (an old handkerchief is best) on the warm plate, spreading the paste in the middle of it, leaving a margin wide enough to lap well over on all sides. Do not remove paste from the plate until ready to apply. Place a folded cloth between paste and patient's clothing.—*Ex.*

FORMALDEHYDE IN TYPHOID FEVER.
Dr. T. H. Line (*St. Louis Medical Era*) recommends the following formula, governing the dose according to age, idiosyncrasies, etc.:

- R Formaldehyde (forty per cent. solution), gtt. j.

Elixir of lactopeptin, 3 j.

M. This is to be given every one, two, or three hours, according to the severity of the case.—*New York Medical Journal.*

HEROIN.—This new derivative of morphine possesses a sedative effect upon the respiration, more powerful than that of morphine, and decidedly greater than that of codeine. One milligram decidedly lessens the respiratory movements in the rabbit, while with codeine we must increase up to a centigram to get the same results. The fatal dose of heroin is placed at one hundred times that of the medicinal dose. One centigram is an efficacious dose for cough in the adult. It is said to be useful in all subjects who breathe badly, either from recent pneumothorax or pneumonia, and in heart disease.—*Dresler, Gas. Hebd. de Méd. et de Chir.*

DIABETES INSIPIDUS.—

- R Pulv. opii, gr. iv.
Acidi gallici, ʒ ij.

M. Ft. chart. No. xii. Sig. One three or four times daily.—*Wood, Medical Record.*

FÆTID FEET.—

- R Dest. fennel oil, Oj.
Chloral hydrate, gr. xxxv.
Borax, gr. xv.

M. Sig. Wash the feet night and morning.—*The London Practitioner.*

THE PRESCRIPTION

Therapeutic Cullings.

ADMINISTRATION OF GEOSOTE.—Rieck, of Bassum, recommends that geosote (guaiacol valerianate) be given either pure or in combination with wine, cognac, mucilage of acacia, or of salep, olive oil, cod liver oil, tincture of gentian, or, preferably, in gelatin capsules. To children he gives the remedy pure or with an equal volume of alcohol and mixed with wine, milk, oatmeal gruel, etc., in doses of from two to even fifteen drops, three to five times a day. A suitable form of administration is the following:

R Geosote, gr. xv-xxx.
Mucil. acacia (or salep), fl. ʒ
ijj.
Ol.-sugar peppermint, 3 iiss.
Teaspoonful every two to three
hours.—*Pharm. Central.*

LOCOMOTOR ATAXIA.—

R Ferri lactatis, ʒij-iv.
Ext. cinchonæ, ʒj-ʒiv.
Ext. nucis vomicæ, gr. v-xv.
Ext. gentianæ, q. s.
M. ft. pil. 40. Sig. One or two as
a tonic after three meals daily.—*Med.
Rec.*

DISINFECTANT FOR SICK-ROOM USE.
(*Public Health Journal.*) To deodorize and disinfect the vessels, etc., of the sick-room, more especially those containing urine, feces, etc., use the following:

R Zinc chloride, parts 100.
Nitrobenzol, parts 2.
Indigo blue (aniline), parts 15.
Sulphuric acid, parts 5-10.
M. The amount necessary to deodorize and disinfect the contents of a night-vessel is one large teaspoonful. The preparation deodorizes and disinfects in the most complete man-

ner, and almost instantaneously, urine, feces, vomited matter, etc., without decomposing the same in any manner. Before hot weather comes on, when diarrhea and other bowel troubles are on the increase, it might be a good idea to put up the mixture in small bottles for sale at popular prices.—*Dunglison's Col. and Clin. Rec.*

SUPPOSITORIES FOR CYSTITIS.—The *Gazetta degli ospedali e delle cliniche* attributes the following suppository to subdue the pain of cystitis to Guyon:

R Ext. of belladonna,
Ext. of opium, aa gr. 15.
Iodoform, gr. ¼.
Virgin wax, gr. 15.
Cocoa butter, gr. 45.
M. To make one suppository.—*N. Y. Med. Jour.*

PERMANGANATE OF POTASSIUM FOR FISSURES OF THE NIPPLE.—Dr. Domrowski (*Le Progrès Médical*) advises to paint the nipple three or four times daily with a solution of permanganate of potassium, two per cent. to five per cent. The fissures will disappear under this treatment in less than a week. This remedy causes considerable smarting at first but this soon disappears. Nursing is not interfered with, but the breasts should be washed before each feeding with warm sterilized water and a compress covered with a permeable cloth should be used.—*Med. Rec.*

HYPERTRICHOSIS.—

R Tinct. iodi, parts 3.
Ol. terebinth, parts 6.
Ol. ricini, parts 8;
Spir., parts 48.
Collodii, parts 100.
M. Sig. Paint once a day for three days.—*Putte, Med. Rec.*

TAPEWORM.—The following is credited to E. Chamberlin:

℞ Alcohol containing 10 per cent. of chloroform, parts viij.

Rectified ol. of turpentine,
Ethereal extract of male fern,
aa parts iv.

Glycerin, parts xv.

M. Half a teaspoonful to be taken every hour. Before beginning the use of this mixture the patient should take castor oil or magnesium sulphate and as soon as a purgative effect is produced the mixture may be taken. For very young subjects, for example, children two years old, the formula may be modified as follows:

℞ Alcohol containing 10 per cent. of chloroform,

Rectified ol. of turpentine,
Ext. of male fern, aa parts ij.

Glycerin, parts xv.

M. Sig. A teaspoonful every hour.—*The Atlanta Med. and Surg. Jour.*

BRONCHITIS.—

℞ Ammonium hydrochlorate, gr. 80.

Tartar emetic, gr. i.

Potassium iodide, gr. 16.

Simple elixir, fl. ℥ 4.

Distilled aq., to make fl. ℥ 8.

A tablespoonful every three or four hours.—*Texas Med. Jour.*

HÆMOPHILIA, OXYGEN INHALATION.—An interesting case of hæmophilia was observed occurring in a boy aged 13 years, with six brothers and seven sisters. The brothers had all bled to death. The girls were alive and well; two were married and had borne children. A maternal uncle had died from hemorrhage from the stomach and a maternal aunt had died at the age of 14 from bleeding. The patient gave a history of many swellings in his joints following slight injuries. He had bled from the gums and nose and the roof of the mouth. Slight injury to the right thigh had resulted in a large fluctuating swelling that was tender to the touch, while the overlying skin was red and thin. The patient was markedly anemic. An incision was made through the skin and a quantity of clot and some purulent fluid escaped. In spite of packing

and pressure and internal administration of styptics the bleeding continued and the boy grew rapidly weaker. Bleeding from the nose and gums took place also. The stomach rejected everything. Death seemed inevitable. At this juncture inhalations of oxygen in large doses were resorted to. Within twenty-four hours the vomiting and bleeding stopped and the boy began to take milk freely. Recovery was eventually complete.—*Dodd, Lancet.*

URETHRITIS.—Injections during the acute stages of urethritis for a sedative astringent:

℞ Plumbi acetatis, gr. iv.

Vini opii, 3 ij.

Aq. rosæ, q. s. ad ℥ ss.

Sig. Inject three times daily.

This is to be followed by a bichloride of mercury injection (solution 1 to 15,000) in combination with a small amount of glycerin.—*The Atlanta Med. and Surg. Jour.*

DIABETIC COMA.—Robin (*Bull. de Therap.*) discusses this subject and gives the following treatment which is based upon the probable assumption that the coma is due to toxemia and diminished alkalinity of the blood. He advises the early administration of the following solution intravenously:

℞ Sodii chloridi, 3 j.

Sodii carbonatis, 3 iiss.

Aq. destillatæ, ℥ ij.

In addition, saline hydragogue cathartics, such as sulphate of sodium, should be given to produce watery evacuations of the bowels. The exhibition of large doses of bicarbonate of sodium by the mouth will also materially assist in increasing the alkalinity of the blood. Robin believes that a strict milk diet is the best in these cases. When the heart becomes weak and irregular he recommends full doses of digitalis and ergotin.—*Progress of Med. Sciences.*

SOLOMON'S MIXTURE FOR INFANTILE CONVULSIONS.—

℞ Moschi, gr. vij.

Gum acacia, 3 ss.

Aq. fœniculi,

Syr. aurant. cort., aa ℥ j.

M. Sig. A teaspoonful every hour or two.—*N. Y. Med. Jour.*

UNCONTROLLABLE VOMITING.—The *Jour. des praticiens* recommends the following treatment:

- ℞ Menthol, gr. ij.
Hydrochlorate of cocaine, gr. iv.
Alcohol, ℥ ij.
Syr., ℥ j.

M. A small teaspoonful every half hour until several doses are taken.

The following may also be used in case of the vomiting of tuberculosis:

- ℞ Menthol, gr. iv.
Syr., ℥ v.

M. Shake well before using, and give from two to three teaspoonfuls at short intervals after each meal.

According to Ferrand, in some cases of spasmodic vomiting it is useful to apply the following solution to the pharyngeal wall by means of a cotton compress:

- ℞ Bromide of potassium, gr. 75.
Glycerin, ℥ 2.

M. Such an application should be made after each meal to diminish the sensibility of the pharynx.—*Med. Standard*.

IODINE.—Briquet recommends iodine in most cases of acute and chronic aortitis, aneurism arteriosclerosis, and in disturbances of circulation caused by heart-lesions. It is particularly indicated in asthma, in long continued bronchitis due to grippe, in some cases of acute as well as of chronic bronchitis, in protracted pneumonia, in congested lungs, and in coryza and ozena. It is of great value in syphilis, actinomycosis, mercurial and chronic lead poisoning, and frequently in cases of arthritis, iritis, and hyperostoses. It is useless in diseases of the liver, kidney, alimentary tract, non-syphilitic diseases of the nervous system, and in infectious diseases. The belief that it affects the secretions of milk is unfounded. As a rule the potassium salt of iodine is preferable to the sodium one, except in some cases of rheumatism and diseases of the respiratory tract. It is well to change to the sodium salt when from any cause the potassium is badly borne. When beginning iodine treatment it is usually best to start with the sodium salt, because of the greater tolerance for it displayed by the

system, but later the potassium salt can be used. Potassium iodide when long used seems to act as a depressant. When, therefore, it is found advisable to continue the iodine treatment for a great length of time the two salts should be used in rotation. *Presse Med.*

INTERNAL TREATMENT OF URETHRITIS.—

- ℞ Liq. potassii, 3 j.
Bals. copaibæ, ℥ j.
Ol. gaultheriæ, m x.
Ext. glycyrrhizæ, fl., ℥ ss.
Saccharin., q. s.
Muc. acaciæ, q. s. ad ℥ iv.

Sig. A teaspoonful every two or three hours.—*Lydston, Amer. Text-Book of Genito-Urinary Diseases.*

URÆMIA.—The headache and sleeplessness occurring in uræmic patients can generally be removed by the hypodermic injection of morphine. I have not given this treatment in uræmic convulsions or coma, but I have largely used it in many cases of uræmia with other troubles, and am sure that morphia may be given to such patients with every prospect of benefit and risk of harm. *Ringer, Med. Rec.*

NEURASTHENIA.—

- ℞ Sodium bromid., ℥ i ½.
Solution of potassium arsenite, fl. ℥ i.5.
Extract of ergot, 3 i.
Camphorated tinct. of opium, fl. ℥ i.
Aq., to make, fl. ℥ 4.

M. One teaspoonful in water after meals.—*Louisville Med. Mon.*

CHRONIC BRONCHITIS WITH COPIOUS EXPECTORATION.—

- ℞ Alum, 3 ss.
Wine ipecac., fl. 3 iss.
Syr. tolu, fl. 3 iv.
Aq., to make fl. ℥ iij.

Two teaspoonfuls every three hours. For a child one year old.—*Goodhart, Med. Rec.*

MOUTHWASH FOR SICK CHILDREN.—

- ℞ Acid tartar, gr. 46.
Aq. destil., ℥ 5.5.
Aq. menth. pip., 3 5.

M. Sig. Use as a mouthwash.—*Pediatrics.*

ACIDITY,—

R Spir. ammoniæ aromatici, fl. ʒ ij

Sig. Half teaspoonful in water before meals. Indication: For excessive gastric acidity due to fermentation or hypersecretion.

R Magnesiae, ʒ j.

Sig. Half to one teaspoonful in water before meal. Indications: For gastric hyperacidity accompanying constipation. Smaller doses if constipation is not present.

R Liq. calcis, fl. ʒ viij.

Sig. Tablespoonful every two hours. Indications: For "sour stomach" in children. When given with milk it prevents the rapid and solid formation of the caseine, and assists in its digestion. In many cases larger doses may be employed.

R Sodii bicarb., ʒ j.

Pulv. rhei, ʒ ss.

Spir. menthæ. pip. fl. ʒ ij.

Aquæ, q. s. ad fl. ʒ iv.

M. Sig. One tablespoonful after meals.—*Bellevue Hospital*.

R Hydrarg. cum creta, gr. viij.

Bismuth subnit., gr. xij.

Pulv. nucis myristicæ, gr. iij.

M. Et ft. chart. No. vi. Sig. One powder night and morning. (For children.)—*Gerhard*.

R Liq. calcis,

Aq. cinnam., aa fl. ʒ ij.

M. Sig. One or two teaspoonfuls in ice water as required.—*Starr*.

R Tinct. nucis vomicæ, fl. ʒ j.

Sig. Five drops in water before meals three times a day.—*Ringer*.

R Sodii bicarb., ʒ iij.

Div. in chart. No. xii. Sig. One powder in wineglassful of cold water after meals.—*Clark, Dominion Medical Monthly*.

FASTING IN THE TREATMENT OF INFECTIOUS DISEASES.—De Domenicis (*Wiener Med. Presse*) is a strong believer in the old doctrine of fasting in fevers, and his zeal has earned for him the name of the "hungry doctor" among the laity of Naples. Taking pneumonia as an example, he has made a study of 140 cases from this point of view. A specific virus and exposure to cold are not enough in themselves to cause pneumonia. The third factor is a bad state of the gastro-intestinal canal, and a resulting condition of auto-intoxication which lowers the vitality of the

patient, and increases the virulence of the pneumococcus. The author, therefore, washes out the stomach in these cases, and then administers intestinal disinfectants, and this procedure is followed by a fast of several days, or even of a week, in certain cases. In other words, the author believes that the deadly agency in pneumonia comes from the specific toxins as much as from products in the intestinal canal. It would appear that the author does not use his fasting therapeutics unless there is some special evidence of gastro-intestinal auto-intoxication. He mentions arthritis as another form of disease eminently suitable for fasting.—*The Atlanta Medical and Surgical Journal*.

ACUTE GASTRIC CATARRH.—

R Subnitrate of bismuth, gr. x.

Potassium bromid., gr. xv-xx.

Dilute hydrocyanic acid, m xv.

Spir. of chloroform, m xx.

Mucilage of acacia, fl. ʒ ij.

Aq., to make fl. ʒ j.

M. To be taken every three hours. *Louisville Med. Mon.*

BUBOES.—M. Reynaud, of Marseilles, recommends highly the treatment of ulcerated buboes by heat derived from the thermo-cautery brought to a white heat and held for five minutes at a distance of half an inch from the ulcer. The patients complained only of a disagreeable sensation. The simple operation is done once a day and after the second or third application, the wound is seen to become modified in its character and in a week is cicatrized. After each seance a piece of hydrophile cotton steeped in sterilized water is applied to the ulcer.—*Louisville Med. Mon.*

LOTION FOR ACNE PUNCTATA.—Dr. A. Malbec (*Province Medicale*) recommends this formula:

R Borax,

Sodium bicarb., aa parts 10.

Ether, parts 20.

Aq. rose, parts 300.

M. To be used after pressing out the contents of the follicles and in conjunction with frictions twice a day with sulphur soap and very hot water.—*Ex*.

QUINOLINE IN THE TREATMENT OF WHOOPING-COUGH.—G. Koch, according to a summary of an article by Marius Martin (*Gazette hebdomadaire de médecine et de chirurgie*) prescribes quinoline in whooping-cough, to be taken internally in daily amounts of from four to fifteen grains, according to the patient's age and the severity of the disease. He gives the following formula:

R Quinoline tartrate, part 1.
Distilled water,
Syrup, aa parts 75.

M. Sig. A tablespoonful every three hours.—*Louisville Med. Monthly*.

PLEURITIS WITH EFFUSION.—

R Mercuric chlorid.,
Sodium chlorid.,
Ext. of opium, aa gr. 15.
Fresh breadcrumbs, gr. 75.
Gluten, gr. 38.
Glycerine, gr. 30-40.

M. and divide into 100 pills. One, two or three to be taken daily.—*Robin, Ther. Digest.*

TO DETERMINE DEATH OF THE FŒTUS.—Death of fœtus is accompanied by the appearance of acetone in the urine of the mother; this may easily be demonstrated by the fuchsin test of Chautard. A solution of fuchsin, 1 to 2000, is decolorized by sulphuric acid. To make the test half an ounce of urine is poured into a test tube, and a few drops of the fuchsin solution added. If acetone is present the color of the urine becomes violet, the depth depending on the quantity of acetone. This simple test is within the reach of every practitioner.—*Med. News.*

FISSURES OF THE HANDS.—

R Menthol, grm. j.
Salol, grm. ij.
Ol. oliv., grm. x.
Lanolin, grm. xxx.

M. Sig. Apply morning and night.—*Comby, Med. Rec.*

SUBCONJUNCTIVAL INJECTIONS OF SOLUTION OF IODINE AND IODIDE IN CHOROIDITIS.—Sourdille, of Nantes, having established the value of a solution of iodine and iodide of potash as absorptive agent, has employed it for the different forms of choroiditis:

disseminated choroiditis, macular choroiditis, posterior sclerochoroiditis, atrophic choroiditis of myopes, and syphilitic chorioretinitis.

Every two or three days he injects under the conjunctiva of the bulb, after using cocaine, four or five drops of the following solution:

R Iodine, gr. $\frac{1}{4}$ or $\frac{1}{2}$.
Potassium iodide, gr. 15 $\frac{1}{4}$.
Distilled water, boiled, fl. 3 8 $\frac{1}{4}$.

The pain is inconsiderable and lasts from fifteen minutes to two hours. A slight chemosis disappears in from twelve to fourteen hours. He adds also the continuous electric current. In cases of syphilis he uses intramuscular injections of oil with biniodide of mercury (Prof. Panas' formula).

At the end of two or three weeks results appear, floating bodies grow less, macular scotomata ameliorate and central vision becomes more acute, even in macular choroiditis usually hopeless in prognosis.

He has obtained good results also from this method in four cases of profuse hemorrhages into the vitreous, and in several cases of inveterate leucoma. Two cases of interstitial keratitis in young and four in old people were equally benefited by the treatment.—*Ex.*

BED SORES.—

R Alum, $\frac{3}{4}$ ss.
White of four eggs.
Tinct. of camphor, $\frac{3}{4}$ ij.

M. Sig. An excellent application. Use charcoal poultices; wash and dress antiseptically; avoid pressure on parts. The charcoal poultices will clear away the sloughs.—*Louisville Med. Mon.*

A PROCEDURE FOR PREVENTING CLOUDINESS ON THE LARYNGEAL MIRROR WITHOUT HEATING IT.—*Lyon medical* states that this procedure, which M. Kiritein presented to the Berlin Medical Society (*Médecine moderne*), consists in covering the mirror with a small quantity of soft soap in such a way that the mirror remains bright. This soap absorbs the vapor from the water, so that no cloudiness is produced on the surface of the mirror. This procedure is applicable to the lenses of a microscope also.—*Louisville Med. Monthly.*

TO AVOID OTITIS IN SCARLATINA. According to Comby, the pharyngeal cavity should be painted several times a day with a 10 per cent. solution of resorcin, by means of a cotton swab (this may occasionally cause oliguria with green or dark urine). Naphthol-camphor is also recommended for this purpose, as follows:

R B. naphthol, 10.0.
Camphor, 20.0.
Glycerin, 30.0.

M. Sig. For external application.—*Louisville Medical Monthly*.

FORMALIN DOUCHE.—Dr. Wallace A. Briggs, of Sacramento, (*Amer. Gynecological and Obstetrical Jour.*) advises in puerperal sepsis without uterine infection, vaginal formalin douches 1:500. When the uterus is infected he uses intra-uterine formalin douches 1:500, every twelve hours, followed by hydrogen dioxid solution injected by means of a piston syringe. He then fills the uterus with antiseptic glycerin, *i. e.*, formalin, 1; alcohol, 100; glycerin, 400. Dr. Briggs then leaves the patient in an exaggerated Sim's position for at least an hour, so that the glycerin will remain in the uterus. After the fourth injection he substitutes a 2 per cent. lysol solution for the formalin.—*Louisville Med. Mon.*

BOILS.—For boils L. Duncan Bulkley commends the following for local application:

R Acid. carbol., gr. v-x.
Ext. ergot, 3 j-ij.
Pulv. amyli,
Zinci oxidi, aa 3 ij.
Ungt. aq. rosæ, 3 viij.

The Atlanta Med. and Surg. Jour.

PICRIC ACID IN GONORRHEA AND HERPES ZOSTER.—Picric acid has been used in the form of an injection in acute gonorrhea by Antonelli and Scatolari, a pint of filtered 0.2- to 0.5 per cent. solution being used thrice daily. The injections were made as are potassium-permanganate irrigations under pressure, the irrigator being elevated from 3 to 4½ feet. The picric acid solution possesses a distinct analgesic and antiseptic action, is non-toxic, and readily penetrates the tissues, thereby enabling a direct action to be exert-

ed on the gonococci. According to bacteriological experiments a cure may be obtained by means of picric acid in two weeks.

In herpes zoster picric acid was used in the form of compresses, which were applied to the previously opened blister. The solution employed was made as follows:

R Picric acid, parts j.
Citric acid, parts ij.
Distilled water, parts x.

The compresses caused but a transient burning, soon followed by a feeling of great relief. After the blisters have been dried, the pains may be relieved by the application of suitable ointments or powders, or even by means of an electric current.—*Merck's Bericht*.

SEVERE GASTRO-INTESTINAL INFECTIONS OF INFANCY.—

R Bihydrochlorate of quinine.
Asafetida.
Tinct. musk, aa. grm. i.
Boiled water, grm. 120.
Yolk of one egg.

M. Sig. Use as an injection; this is sufficient for two or three injections.—*Féde, Semaine méd.*

HOW TO USE POLITZER'S BAG.—The *Presse médicale* gives the following directions: Blow the nose carefully to rid it of mucus. Take a little water into the mouth and hold it there for the time being. Insert the end-piece of the tube deep into the right nostril and hold it there with the fingers of the left hand, at the same time closing the left nostril with the left thumb. Then, with the right hand, squeeze the bag vigorously at the very moment of swallowing the water. Withdraw the nose-piece before allowing the bag to expand again. The insufflation should be practiced two or three times in succession.—*Louisville Med. Mon.*

HEADACHE.—

R Sodium bromid., 3 j.
Phenacetin, gr. xxx.
Caffein citrate, gr. xvij.
Sodium bicarbonate, 3 j.

M. and divide into six powders.

Dose, one to be taken every fifteen minutes until relief is afforded; to be followed by a seidlitz powder.—*Stalder, Therapeutic Digest*.

SCIATICA.—There are two groups: 1st, those of sudden onset; 2d, those of slow development. In the first, if patient can rest in bed, forbid his rising; apply *loco dolenti*:

- ℞ Spir. terebinth.,
Ol. gelsemii, aa grm. 5.
Ceræ albæ, grm. 2.
Ungt. simplicis, grm. 40.

At night introduce a morphine suppository. Wring out the corresponding leg of a pair of drawers in water at 18°C., which is immediately drawn on over the affected limb and covered with sheets so as to keep up an atmosphere charged with moisture. This may be renewed during the night. After a few days apply day and night. In group two, massage is employed, but never in group one. Electricity is of occasional benefit. Avoid, after cure, all exaggerated fatigue; bicycle, horseback riding, mountain climbing.—*Hirschhorn Centralblatt f. d. ges. Therap.*

TO ALLAY CHORDEE AND SEXUAL EXCITABILITY.—

- ℞ Ext. ergotæ, fl. m xv.
Tinct. gelsemii, m v.
Potassii bromidi, gr. xx.
Tinct. hyoscyami, 3 ss.
Syr. aurantii, q. s. ad 3 ss.

Sig. To be taken at bedtime.—*The Atlanta Med. and Surg. Jour.*

FASTING IN ACUTE DISEASE.—Man and animals are rendered more resistant to the action of bacteria and their toxins by abstaining from food within certain definite limits. Even milk, when not properly digested, undergoes such changes, due to fermentation and putrefaction, that the resistance to bacterial and toxin influence on the part of the tissues and their secretions is lessened. In pneumonia, particularly, much benefit may be derived from fasting conjoined with gastro-intestinal disinfection.—*Dominicis, Wiener med. Presse.*

ECZEMA OF THE ANUS WITH EXCORIATIONS.—Eczema of the anus with excoriations, as frequently found in persons with hemorrhoids, may be treated, according to Brocq (cited in the *Therapeutische Wochenschrift*) by bathing the anus with boric acid water, applying zinc ointment and then dusting on the following pow-

der copiously and holding it on as well as possible with a pad:

- ℞ Powd. camphor, parts 2.
Zinc oxide,
Bismuth subnitrate, aa parts 30.
Talc., parts 40.

M. If the parts are somewhat irritated they may be penciled every two days with a four per cent. solution of silver nitrate. The anus should be washed with boric acid solution after every evacuation.—*N. Y. Med. Jour.*

URETHRITIS.—During the stationary stage of urethritis the following is more serviceable:

- ℞ Zinci sulph. (acetat.), gr. xij.
Morph. sulph., gr. x.
Glycerin., 3 j.
Aq. rosæ, 3 iij.

Sig. Injection.—*The Atlanta Med. and Surg. Jour.*

MUSTARD FLOUR AN ANTISEPTIC AND DEODORIZER.—Common mustard can be found in almost every house, and when other antiseptics are not accessible the hands can be made aseptic by rubbing them well with mustard flour, moistened with hot water, so that a paste is formed. This should be rubbed in thoroughly for one or two minutes; then wash the hands in plain hot water. In this way all disagreeable odors can be removed from the hands, such as those of fetid pus and the post-mortem room.—*Progress of Med. Science.*

DYSPEPSIA.—The following prescription is often made use of by M. Linossier:

- ℞ Sodium bicarbonate, gr. 300.
Calcined magnesia, gr. 75.
Bismuth subnit., gr. 30.

M. This quantity may be divided into 12 or 25 capsules, according to the intensity of the acidity, and the proportion of magnesia and that of bismuth subnitrate may be varied in accordance with the intestinal functions.—*N. Y. Med. Jour.*

LATER STAGES OF GONORRHEA.—

- ℞ Terebinth. alb., 3 j.
Res. podoph., gr. ss.
Camphor monobrom., 3 j.

M. et ft. pill No. 30. Sig. One pill four times a day.—*The Atlanta Med. and Surg. Jour.*

BRONCHO-PNEUMONIA IN CHILDREN. Dr. Gaston-Lyon recommends the following prescription:

℞ Syr. of gum,
Syr. of tolu, aa ʒ 2.
Cognac, *m* 150.
tate of ammonium,
Benzoate of sodium, aa gr.
22½.

M. A dessertspoonful every hour or two hours, according to age. If the cough is very troublesome, a little of the tincture of belladonna may be added to the above prescription.—*N. Y. Med. Jour.*

INFANTILE DIARRHEA.—Symes, in the *Dublin Jour. of Med. (Ther. Gaz.)* suggests the following prescription for a child of three months, as a sedative in cases of infantile diarrhea:

℞ Tinct. opii camphorata, *m* j.
Glycerini acidi carbolici, *m* ij.
Ol. ricini, *m* v.
Mucilaginis acaciæ, *m* xv.
Aq. menthæ piperitæ, q. s. ʒ j.

This is to be given every four hours. *Med. Fortnightly.*

LOCAL APPLICATION FOR NASAL ULCERS IN OZÆNA.—Professor Adolfo Fasano (*Archivio internazionale di medicina e chirurgia*) recommends for topical use in the more or less deep ulcerations that are found in inveterate ozæna the following application:

℞ Aristol, gr. 150.
Collodion, gr. 1,200.
Castor oil, gr. 150.

M. The application should be made daily by means of small cotton holders.—*N. Y. Med. Jour.*

• VAGINAL DOUCHES.—When vaginal douches are ordered for patients it is essential, if the parts to be acted upon are to be reached, that detailed instructions of how to use a douche should be given to the patient. The kind of syringe and nozzle, the position of the patient, the time when to take the douche, the temperature and amount of fluid to be used, should all be specified. Powdered borax, one drachm to the quart of water, is a mild cleansing douche; zinc sulphate, two drachms to the quart, is astringent and disinfectant; alum, one drachm to the quart is an efficient astringent; mercuric chlor-

ide, 1:3000 to 1:5000, is the one most commonly employed in Dr. Baldy's clinic. Tannic acid, potassium permanganate and fluid extract of hydrastis all stain the clothing, and are seldom prescribed.—*Phila. Polyclinic.*

ENEMA FOR MEMBRANOUS ENTEROCOLITIS.—We find the following formula in the *Progrès médical* taken from the *Revue médicale de la Suisse romande*:

℞ Quince-seed mucilage, gr.
7,500.

Bismuth subnitrate,

Bismuth salicylate, aa gr. 150.

M. After purgation with castor oil, this enema is to be administered. It should be retained for twenty-four hours if possible.—*N. Y. Med. Jour.*

IRRITABLE UTERUS, DIFFUSE PELVIC PAINS AND HYSTERICAL NEUROSES.—In irritable uterus, diffuse pelvic pains and hysterical neuroses in various parts of the body:

℞ Potassii bromidi, ʒ j.

Aq., O j.

M. Sig. Use as a vaginal injection.—*Mundt, Med. Rec.*

HYPERTROPHY OF TONSILS.—

℞ Iodine, gr. j.

Potassium iodide, gr. ij.

Tinct. opium, *m* xvij.

Glycerin, ʒ iv.

Paint on the tonsil morning and evening, and use half a teaspoonful in a glass of warm water for a gargle.—*Louisville Med. Monthly.*

TOOTH POWDER.—Dr. Marchandé, a dentist, recommends the following formula in the *Jour. des praticiens*:

℞ Powd. pumice, gr. 75.

Medicinal soap, gr. 30.

Resorcin, gr. 15.

Precipitated chalk, gr. 300.

Ess. of peppermint, gtt. 5.

M.—*Ex.*

CHRONIC INTESTINAL INDIGESTION IN CHILDREN AFTER DENTITION.—

℞ Fl. ext. of spigelia, fl. ʒ ij.

Ext. of senna, ʒ ij.

(Or fl. ext. of cascara, fl. ʒ j.)

Tinct. of nux vomica, fl. ʒ ij.

Comp. tinct. of cinchona, fl. ʒ 4.

Comp. syr. of sarsaparilla, fl. ʒ 2.

Dose. One teaspoonful three times a day.—*Louisville Med. Mon.*

NITROGLYCERINE IN ANGINA PECTORIS.—The most efficacious form of administering nitroglycerine in angina pectoris:

- ℞ Nitroglycerin, gr. iij.
Tinct. capsici, 3 ss.
Spir. rectificat.,
Aq. menth. pip., aa 3 iij.

Sig. Two to ten drops.

In one minute the action of the drug is manifest, and in scarcely three minutes the pain is entirely done away with. As the patient grows accustomed to the dose it must be increased, and if this be done carefully there is no great danger to be anticipated.—*Schott, Wiener klinische Rundschau.*

NERVOUS DISTURBANCES OF GASTRIC ORIGIN.—The *Clinica moderna* gives the following:

- ℞ Metallic magnesium, gr. $1\frac{1}{2}$;
Glycerophosphate of calcium, gr. $4\frac{1}{2}$;
Powd. ignatia bean,
Bromide of calcium, aa gr.

$\frac{10}{100}$;

in each powder. One powder to be given with each meal.—*N. Y. Med. Jour.*

ATONIC DYSPEPSIA.—

- ℞ Strych. sulph., gr. j.
Acidi nitric. dil. (if bowels loose), fl. 3 ij.

Or,

- ℞ Acidi nitro. mur. (if constipated), fl. 3 ij.
Tinct. card. comp.,
Tinct. gent. comp., aa fl. $\frac{3}{4}$ iij.
Liq. pepsinæ, q. s. ad fl. $\frac{3}{4}$ viij.

Sig. Dessertspoonful after meals.
The Med. Standard.

CHLOROFORM IN THE TREATMENT OF TUBERCULOSIS.—M. Desprez, in a paper read before the Congrès de la Tuberculose, strongly recommends the employment of chloroform as an adjuvant to the treatment of tuberculating his claim on the well-known anti-bacillary properties of this drug. He calls attention to the harmlessness of chloroform in small doses, to its very rapid elimination and its strongly prophylactic effects; he believes greatly in washing various tubercular and generally purulent foci with chloroform water. He is perfectly convinced from his own expe-

rience of the great potency of this drug as an aid in the treatment of tuberculosis, and recommends that it be given a fair and thorough trial.

At the same congress P. Gallot delivered an address on the employment of subcutaneous injections of iodoform in tuberculosis. In one case, that of a woman, twenty-one years old, who was suffering from incipient tuberculosis, he obtained excellent results from a daily subcutaneous injection of the following:

- ℞ Oil of neutral vaseline, gr. v.
Eucalyptol, 3 j.
Iodoform, gr. xv.

The author claims a similarity between iodoform, when taken internally, and digitalis, for it tends to diminish the cardiac pulsations while increasing arterial tension; having, however that advantage that it never tends to accumulation in the system. His conclusions were also strengthened by experimentation on animals.
Bulletin Général de Therapeutique.

DRY STOOLS DUE TO EXCESSIVE ABSORPTION IN LARGE INTESTINE.—

- ℞ Tinct. lobeliæ, m v-x.

Or:

- ℞ Ext. lobelia fl., m iij-v.
Ext. cascariæ sagradæ fl., m xxx-xlv.

M.—*Hare, Med. Rec.*

GASTRALGIA.—According to the *Practitioner*, the following prescription for gastralgia has the high authority of Professor Ewald, of Berlin:

- ℞ Codeinæ phosphatis, gr. $\frac{1}{4}$.
Bismuthi subnitratæ, gr. 5.
Sacchari lactis, gr. 3.

M. Sig. This as a dose every two hours.—*N. Y. Med. Jour.*

COUGH IN LARYNGEAL TUBERCULOSIS.—

- ℞ Codeine sulphate, gr. 3.
Sodium bromide, gr. 120.
Syr. wild cherry, fl. 3 4.
Aq., to make fl. $\frac{3}{4}$ 2.

A teaspoonful every four hours for cough.—*Donnellan, Ther. Gaz.*

TUBERCULOSIS OF LUNGS.—

- ℞ Creosoti (beechwood),
Spir. chloroformi,
Alcoholis, aa 3 ij.

Sig. To use in inhaler.—*Louisville Medical Monthly.*

DIPHThERIA OF ADULTS.—

℞ Tinct. aconiti, gtt. 20.
Tinct. belladonæ, grm. 1.
Glycerin, grm. 15.
Aquæ gaultheriæ dest., grm.
120. M.

Or,

℞ Potassii chloratis,
Sodii bromidi,
Liq. ferri sesquichloridi, aa 1.8.
Glycerin, 15.
Aquæ dest., 120.

M. Sig. To be given alternately every fifteen minutes in half-teaspoonful doses.—*Douglass, Jour. de Méd. de Paris.*

FIRST STAGES OF ACUTE BRONCHITIS.—

℞ Wine ipecac, *m* 90.
Sol. potass. cit., fl. 3 4.
Camph. tinct. opium, fl. 3 1.
Syr. tolu, to make fl. 3 3.

Teaspoonful every two hours.—*Rixa, Med. Sum.*

HEMORRHAGE OF TRAUMA AND MENORRHAGIA.—Reveadin (Geneva) recommends the sulphate of sodium internally in doses of half a grain every hour.

OINTMENT FOR VARICOSE ULCER.—

℞ Ac. carbolicæ, 3 ss.
Ac. boricæ, 3 iiss.
Camphoræ, 3 ij.
Ichthyol, 3 v.
Gl. amygdalæ dulc., 3 iiss.
Ungt. zinci oxidi, 3 iiss.

M. Sig. For external use.—*Gaillard's Med. Jour.*

CREASOTE IN TUBERCULOSIS.—Creasote improves the resisting power of each cell, which it stimulates to a more perfect metabolism, and if to this favorable condition there are added an abundance of good food to supply these cells with nourishment, and plenty of fresh air to supply the blood with good red oxyhæmoglobin that may further assist their metabolic processes, the patient is placed under the best conditions for recovery. The creasote, it will be observed, does not exercise an antibacillary action, nor does it even diminish the virulence of the tubercle bacillus, but as a treatment for tuberculosis it is the most satisfactory agent that we know, since it suc-

ceeds in establishing a condition of health in the mucosa that will help nature to overcome the disease.—*Editorial, Jour. of the Amer. Med. Asso.*

INFLUENZA.—

℞ Salol, gr. xxxvj.
Phenacetine,
Quinine hydrochlorate, aa gr.
xxiv.

M. in capsules No. 12. Sig. One every two hours.

To relieve pain in head, back and limbs.—*Thornton, Med. News Formulary.*

COUGH REMEDY.—

℞ Tinct. sanguinaria, fl. 3 j.
Codeine sulphate, gr. iij.
Spir. nitrous ether, fl. 3 ij.
Syr. wild cherry, fl. 3 j.
Syr. ipecac., *m* xxx.
Ol. wintergreen, gtt. ij.

Teaspoonful every three hours.—*Louisville Med. Mon.*

ENTERITIS.—In cases of nursing infants, where, after taking milk, there follows a colicky condition, with griping pains, etc., the administration of a purge is beneficial. The following is an excellent prescription:

℞ Strophantus, gr. 1-250.
Sodii bicarb., gr. ½.
Lactopeptin, gr. 1.
Ol. cajuput, *m* 1.
Tinct. valerianæ arom., *m* 5-10.
Glycerinæ, gtt. xx.
Aq. anethi, 3 2.

M. Sig. Three or four times daily.—*Doherty, Med. World.*

NEURALGIA.—The *Revue de Therapeutique* gives the following prescription:

℞ Ext. of hyoscyamus,
Ext. of valerian, aa gr. iv.
Hydrochlorate of morphine,
gr. j.

Make into four pills; take one to four in twenty-four hours.—*Ex.*

TYPHOID FEVER.—

℞ Spir. terebinth. rec., 3 i.
Spir. juniperis, 3 5.
E. hamel. f., 3 2.
Pulv. acaciæ, 3 1.5.
Aq., q. s. ad 3 6.

M. Sig. Dessertspoonful every four hours while awake.—*Christian, Southern Med. Jour.*

HEPATIC CONGESTION.—Monin recommends the following:

1. Let the patient take daily in a wineglassful of hot water a teaspoonful of the following powder:

℞ Bicarbonate of sodium,
Sulphate of sodium, aa gr. 900.
Phosphate of sodium, gr. 600.
Benzoate of sodium, gr. 300.

2. Before meals in a cachet:

℞ Powd. ignatia amara,
Powd. squill, aa gr. $1\frac{1}{2}$.
Sulphate of sparteine,
Amorphous quassine, aa gr. $\frac{3}{4}$.
Theobromine, gr. $3\frac{3}{4}$.

Two cachets to be taken daily.

3. After each meal in a wineglassful of water a teaspoonful of the following mixture:

℞ Pure glycerin, $\frac{3}{4}$ 6¼.
Tinct. of boldo, $\frac{3}{4}$ 3¼.
Lactic acid, gr. 225.

N. Y. Med. Jour.

SUBINVOLUTION.—

℞ Potassii bromidi, $\frac{3}{4}$ ss.
Extr. ergot fl. (Squibb's),
Aq. cinnamom., aa $\frac{3}{4}$ iss.

M. Sig. A teaspoonful to be taken in a wineglass of ice-water four times a day.—*Maynard, Med. Rec.*

AMENORRHEA.—

℞ Liquoris ferri et ammonii acetati, fl. $\frac{3}{4}$ viij.

Sig. Tablespoonful in water every three hours. Indication: Anemia with scanty urine.

℞ Ferri sulphatis exsiccati,
Aloes purificatæ,
Saponis, aa gr. 100.

M. et ft. pil. No. 100. Sig. One pill after meals. Indications: When due to anemia and constipation.—*Dominion Med. Mon.*

TREATMENT OF URÆMIA BY SUBDERMAL INJECTIONS OF DECINORMAL SALINE SOLUTION.—Dr. Poteenko reports two cases of acute parenchymatous nephritis (*Medicinskoe Obosvenie*) treated by subcutaneous injections of physiological saline solution. In both cases severe uræmic symptoms were present, and the quantity of urine passed was small. Three hundred cubic centimetres of salt solution, at a temperature of 40° C., were injected each time. A beneficial action of the fluid was noticed after the first injection, and mani-

fested itself in a regulation and toning up the heart action, in a subjective improvement of the general condition of the patient, and almost always by an increased secretion of urine. Both cases were completely cured by this method of treatment. *Med. Rec.*

ACUTE DIARRHEA IN INFANTS.—Dr. Charles Gilmore Kerley, in the *N. Y. Med. Jour.*, writes: Closely following upon the administration of the calomel and change in the diet, the following prescription, or some modification of it, is ordered:

℞ Bismuth subnitrate (Squibb),
gr. xj-xx.
Bismuth salicylate, gr. j.
Aq., q. s. to make 3 j.
Aromatic tinct. of rhubarb, m
j-ij.

This is given hourly, twelve to twenty grains to a child one year old. The limit to bismuth subnitrate (Squibb) is twenty grains hourly. This drug, when given frequently in large doses, combined with a small amount of bismuth salicylate, one to two grains, will give most satisfactory and many times astonishing results. Small doses are without value. *The Med. Bull.*

NERVOUS PRURITUS OF THE MENOPAUSE.—

℞ Zinci oxidi, 0.3.
Quin. sulphat., 2.4.
Aloin, 0.15.
Ext. et pulv. liq., q. s.

Ft. 20 pil. Sig. One pill three times a day.—*Shoemaker, Med. Rec.*

DYSPEPSIA CURE.—

℞ Pulv. rhei, 3 ij.
Ext. gentian, fl., 3 iij.
Aq. menth. pip., $\frac{3}{4}$ viss.
Sod. bicarb., 3 vj.

M. Sig. A teaspoonful half an hour before meals.—*Coe, Louisville Med. Jour.*

APHRODISIAC.—

℞ Powd. vanilla,
Powd. canella, aa gr. 45.
Powd. mace, gr. xv.
Powd. black pepper,
Powd. nux vomica, aa gr. 5.
Powd. iron carbonate, gr. 4.

M. ft in cachet No. x. One after meals.—*Louisville Med. Mon.*

AN IMPROVED BLAUD'S PILL.—J. W. England in the *Philadelphia Medical Journal* gives some of the chemical and pharmacological objections to this pill, as commonly made. Some years ago he prepared for the Philadelphia Hospital a formula that has been found satisfactory. Each pill, or rather capsule, which he regards as the preferable form of administration, contains three grains of mass of ferrous carbonate, two grains potassium sulphate, and one-third grain of potassium carbonate, with sufficient althea and acacia to make a mass. The capsules weigh a little over five grains each, are of medium size and keep for months. The formula recommended is:

- R Mass of ferrous carbonate, gr. xxxvi.
Potassium sulphate, gr. xxxiv.
Potassium carbonate, gr. iv.
Powdered althea, gr. j.
Powdered acacia, q. s. to make 12 pills or No. 4 gelatine capsules.

Progress of Med. Science.

IODIDE OF ARSENIC IN SCROFULA. Dr. S. Saint-Philippe (*Journal de médecine de Bordeaux, Gazette hebdomadaire de médecine et de chirurgie*), recommends the following:

- R Iodide of arsenic, gr. $7\frac{1}{2}$.
Distilled water, m 750.
M. Dissolve cold.

Five, ten, twenty, or thirty drops may be taken in divided doses through the day. Ten drops contain about fifteen one-hundredths of a grain (one centigramme).—*Ex.*

NEW VASO-DILATORS.—Capitan (*La Méd. Moderne*) first mentions angina pectoris as a type of disease in which vaso-dilatation is indicated and then observes that our stock remedies (amyl nitrite, nitroglycerine) are too transitory in their action. For a number of years substitutes have been sought for. Several good drugs have unpleasant collateral action (nitric ethers of the fatty-acid series, chlorhydrate of hydroxylamine) which have resulted in their abandonment. Recently the tetranitrate of erythol and hexanitrate of mannitol have been introduced. About an hour is required for them to reduce

arterial pressure, but the result persists for six hours (dose, 6.5 mgm.). The indications for these remedies are angina pectoris, kidney diseases, aneurism, Raynaud's disease, migraine, etc., etc.—*Med. Rev. of Revs.*

FOR DYSPEPSIA WITH FLATULENCE.

- R Tinct. gentianæ,
Tinct. valerianæ.
Tinct. nucis vomicæ, aa 4.
Chloroformi, gtt. 20-40.

M. Sig. Ten to twenty drops in water before meals.—*Centralblatt für die gesammte Therapie.*

PERITONSILLITIS.—

- R Spir. turpentine,
Spir. lavender comp., aa $\frac{3}{4}$ j.
Ol. wintergreen, gtt. v.

Apply thoroughly all about the tonsils and pillars of the fauces every one to three hours.—*Baldwin, Louisville Med. Mon.*

CONVULSIONS OF PERTUSSIS.—

- R Ext. belladonnæ, o.i.
Potassii bromidi, 10.
Syr. aurantii cort., q. s. ad 200.

M. Sig. Teaspoonful morning and evening for young children; older children, dessertspoonful twice a day.—*Jour de Méd. de Paris.*

PTYALISM.—

- R Potassii chloratis, gr. xvj.
Tinct. ferri chloridi, 3 iiss.
Glycerini, $\frac{3}{4}$ j.
Aq., q. s. ad $\frac{3}{4}$ ij.

M. Sig. Teaspoonful in water every two hours.—*Kansas City Med. Rec.*

TO DISGUISE QUININE.—Dr. J. W. Barker, of New Haven, Conn., recommends:

- R Quinæ sulph. 3 ss.
Syr. rhei aromat., $\frac{3}{4}$ iiss.
Tinct. lavend. comp., 3 j.
Syr. zingiberis, 3 iij.

Dose, pro re nata.—*The Med. Bull.*

PULMONARY PHTHISIS.—

- R Ichthyolate of ammonium, grm. x.

Alcohol (65 per cent.) grm. xx.

M. Sig. Thirty drops in a wine-glass of water two or three times a day; increase by two drops until 150 drops are taken daily.—*Branthonne, La France Méd.*

TÆNIFUGE.—

- R Amorphous filicic acid, gr. vj.
 Ethereal oil of male fern, gr. ix.
 Ess. of cinnamon, gtt. x,
 Gum arabic, 3 ij.
 Distilled water, ʒ iij.
 Simple syrup, ʒ iss.

M. Sig. One-half to be taken in the morning on an empty stomach, and the remainder half an hour later. If no effect is produced within an hour or two, castor oil should be given.—*Van Aubel, Medical Record.*

PRURITIS OF THE VULVA.—

- R Mercuric chlorid, gr. x.
 Alcohol, fl. 3 ij.
 Rose water, fl. ʒ v.

M. To be applied locally.

After the parts affected have been washed with soap and tepid water, a plug of cotton saturated with this mixture is to be passed rapidly over the seat of itching. The first sensation is that of burning, but this is quickly relieved by the application of cold water. The employment of the lotion becomes less and less painful, and the cure is generally rapid.—*Tarnier, Ex.*

INCONTINENCE OF URINE.—

- R Strychniæ, gr. j.
 Acidi acetici, gtt. ij.
 Sacchari albi, 3 ij.
 Aq. destilatæ, ʒ ij.
 Ft. solutio.

M. Sig. Fifteen drops for a child 6 to 12 years old.—*North Amer. Med. Review.*

A WORD AS TO THE SUTURE OF HAIRY SKIN.—Bond (*Maryland Med. Jour.*) says that an oblique wound through skin in which hairs are growing is often prevented from uniting, even though approximately stitched. This is because of hairs which have been divided obliquely. As they continue to grow they are unable to find their openings in the superimposed flap, and therefore grow up between the upper and lower edges of the wound, causing irritation, and possibly stitch abscess. The treatment for such a wound is to open it, liberate the hairs, and cut off the projecting flap in order that the deeper hairs may

have no overlying tissue to interrupt their growth. These facts will explain both the slow healing of wounds of hairy skin and the wide white scars which are so common in the scalp and face.—*Kansas City Med. Rec.*

TETANIC CONTRACTION OF THE UTERUS.—*Riforma medica* credits the following prescription to Müller:

- R Tinct. of iodine, gr. xv.
 Alcohol, gr. xxx.

M. Sig. Five drops in half a tumblerful of hot water every half hour.—*New York Medical Journal.*

MULTIPLE WARTS.—

- R Sublimed sulphur, 3 2 ½.
 Glycerin, fl. 3 6.
 Pure acetic acid, gr. 75.

M. To be well shaken, and applied to the affected parts daily until the excrescences are detached.—*Kaposi, Phila. Med. Jour.*

TONSILLITIS IN CHILDREN.—

- R Hydrarg. bichlor. corr., gr. ¼.
 Tinct. ferr. chlor., 3 ½.
 Glycerin, ʒ i.
 Peptic ess. (Peter's) q. s. ft. ʒ 4.

M. ft. sol. Sig. A dessertspoonful every three hours.—*Louisville Medical Monthly.*

PHLEGMASIA DOLENS.—

- R Lard (purified), grm. xxx.
 Ext. opium,
 Ext. belladonna,
 Ext. hyoscyamus,
 Ext. hemlock, aa 3 j.

M. ft. ungt. Sig. Apply over inflamed veins daily.—*Ex.*

LEUCORRHEA.—

- R Tinct. cantharid., 3 i. 5.
 Tinct. ferr. chlor.,
 Acid. phosphor. dil., aa 3 2.
 Syr. limonis, ʒ 2.
 q., . ad ʒ 4.

M. Sig. One teaspoonful in water after meals.—*Ex.*

PAINLESS VESICANT PLASTER.—

- R Menthol,
 Chloral, aa i.
 Spermaceti, 4.
 Cacao butter, 2.

M. Sig. Spread on a piece of linen.—*Allgemeine medicinische Central-Zeitung.*

BRONCHITIS.—

R Terpin, 5.
Glycerini,
Spir. rectific.,
Syr. simpl., aa 70.

Sig. Tablespoonful three times a day.

Or,

R Terpin,
Acidi benzoici pur., aa 0.1.
Opil pur., 0.01.

For one pill. Four such daily.—*Lyon, Med. Rec.*

TURPENTINE IN TUBERCULOSIS.

Richet and Haricourt have experimented on the effect of various substances, especially turpentine, on tuberculosis. The animal experimented on was placed in a close box through which was passed in one hour 1200 litres of air containing 12 grm. of turpentine vapor. Three dogs that had been previously infected with human tuberculosis underwent an hour's treatment of this kind every day for nearly five months, and two recovered, while of 200 dogs which, during the preceding eight years, had been infected in the same manner and to the same extent, not one lived longer than seven months. *Lancet.*

SYPHILIS.—

R Iodi, 1.
Potassi iodidi, q. s. ad sol.
Glycerini; 5-10.
Acidi citrici, 15.
Syrupi simplicis, 1,000.

Sig. Begin with two tablespoonfuls daily and increase to six.—*Bonveyron, Lyon Médical.*

SURGICAL TREATMENT OF PERICARDITIS.—

Brentano reports observations of five patients treated by opening the pericardium by the aid of a resection of the ribs, which he considers as necessary, for a simple puncture will hardly admit the evacuation of the pus, and an incision without a preliminary resection is more dangerous and less efficacious. Only pericardiotomy was successful in acute cases. Two cases of purulent pericarditis terminated in death; two cases of long-standing sero-fibrinous pericarditis were only ameliorated for a time, but in the fifth case, that of a girl ten years of age, a cure fol-

lowed. The pericarditis was consequent upon rheumatic endocarditis. *Deut. Med. Woch.; Boston Med. and Surg. Jour.*

CHRONIC RHEUMATISM.—

R Sodium ichthyol, gr. ij.
Sodium salicylate, gr. ij.

Make one capsule or pill. Three to ten daily, two hours after meals. *Biedert, Tobold, Schlen, Merck's Archives.*

CHRONIC RHINITIS.—

R Cocaine hydrochlorate, gr. 2 ¼.
Camphor,
Alum, aa gr. 1 ½.
Menthol, gr. ¾.
Sugar, gr. 1 ½.

Use as a snuff.—*Maraval, Clinica Moderna.*

WINTERGREEN OIL IN CHOREA.—Luigi has found the external use of oil of wintergreen very effective in the treatment of chorea. He applied the oil either pure or in combination with vaselin on the lower and upper limbs of the patient alternately; and afterward covered the parts with oiled silk to prevent evaporation. The quantity used was from one and a half to two and a half drams. In a few of the cases he gave it internally as well. All did well under this treatment, and it was noted that carbolic acid appeared in the urine six hours after each dressing. The author strongly recommends its use without regard to the presence or absence of distinctly rheumatic symptoms, and particularly in cases where other salicylates cannot be tolerated. *Brit. Med. Jour. Epit.*

ANTISEBORRHOIC HAIR WASH.—

R Chloralis,
Ac. tartarici, aa 1.
Ol. ricini, 0.5.
Spir. vini rect., 100.
Essentiæ flor. æth., 9.5.

—*Eichhoff, Deut. med. Woch.*

HYPERIDROSIS OF THE HANDS.—

R Boracis,
Acidi salicyl, aa 15.
Acidi boracici, 5.
Glycerini,
Alcohol, dilut., aa 60.

Sig. Apply three times a day. *Mode, Med. Rec.*

THE PRESCRIPTION

Therapeutic Cullings.

VAGINISMUS.—Dr. Touvenaint (*New Yorker med. Monatschrift*) advises the following:

- R Stront. bromid.,
Potass. bromid.,
Ammon. bromid., aa $\frac{3}{4}$ i $\frac{1}{4}$.
Aqua dest., $\frac{3}{4}$ 8.
- M. Sig. Tablespoonful twice a day. Or:
- R Zinci valerianat., gr. $\frac{1}{4}$.
Quinin. valerianat., gr. $\frac{1}{2}$.
Ext. opii,
Ext. belladonnæ, aa gr. $\frac{1}{4}$.
- M. Ft. pil. No. 1. Sig. From 3 to 6 pills daily.
- Locally:
- R Ext. krameriaë, gr. $\frac{1}{2}$.
Morphin. hydrochlor., gr. $\frac{1}{3}$.
Ol. theobrom., $\frac{3}{4}$ i.
- Ft. suppos. vaginal. Or:
- R Cocain. hydrochlor., gr. 3.
Ext. belladonnæ, gr. $\frac{1}{2}$.
Stronti bromid., gr. 4.
Ol. theobrom., 3 i $\frac{1}{4}$.
- M. Ft. suppos. vaginal.—*Ex.*

BROMOFORM IN WHOOPING-COUGH. Moritz Cohn, of Hamburg, reports that he has used bromoform for six years, and with varying results. Some cases were rapidly cured, whereas others, although considerably benefited, required a long time for a cure to be obtained. This inconstancy of action is, perhaps, because some other bacillus than that of Ritter, against which the bromoform is not so effective, caused the disease. At times, also, there may be a mixed infection, because even Ritter failed to make cultures in all cases of the bacilli discovered by him. So far as the toxic symptoms reported to follow the use of bromoform are concerned, the author believes them to be largely due to the

method of exhibiting the drug, as they occur but seldom when not too much bromoform is given at a time, and when the preparation is given in suitable form. A combination that has given the author the best satisfaction since 1892 is the following:

- R Bromoform, *m* 3-12.
Absolute alcohol, *m* 10-40.
Powdered acacia, 3 i $\frac{1}{4}$ -5.
Distilled water, fl. $\frac{3}{4}$ 3 $\frac{1}{2}$.
Syrup orange, fl. $\frac{3}{4}$ ss.

Dissolve the bromoform in the alcohol, triturate carefully with acacia, and add, gradually, the distilled water and syrup.

Dose.—One to two teaspoonfuls every two hours. Keep in a dark bottle and shake before using.

When carefully made this emulsion is permanent—the bromoform does not separate out. The operations are to be performed as quickly as possible, to avoid loss of bromoform by evaporation. Should the emulsion be too sweet, the syrup may be replaced by water.—*Therap. Monat.*

LINIMENT FOR HEMORRHOIDS:—

- R Fl. ext. hamamelis,
Fl. ext. hydrastis,
Tinct. benzoin comp., aa 3 ij.
Tinct. belladonna, 3 ss.
Carbolic olive oil, 5 $\frac{1}{2}$, $\frac{3}{4}$ ss.
- M. For external use.—*Ex.*

XEROFORM.—Dr. Heinrich Pasch-
kis, of Vienna, has used xeroform in over one hundred cases of the most varied kinds, including ulcerations of all sorts, eczemas, and various other skin diseases.

The mode of application was very simple. After cleansing the surface of the ulcerations with a wad of cotton the xeroform was dusted on with a camel-hair brush, two to four lay-

ers of absorbent gauze placed over it, and the whole, when necessary, dressed with cotton and a bandage. Bandaging was dispensed with when the ulcerations were seated upon the glans, the inner surface of the prepuce, or the sulcus coronarius. Burns were dressed in exactly the same way. In eczemas and other skin diseases the excoriated areas were either treated in the same manner or they were first powdered with the xeroform and then covered with an indifferent salve or Lassar's paste. *The Med. Bull.*

SALOL AND COCAINE IN BURNS.—Dr. Capitan (*Cronica medica*) asserts that the following ointment suppresses pain and suppuration in burns and promotes healing:

℞ Salol, gr. 120.
Cocaine hydrochloride, gr. 7½.
Vaseline, gr. 900.

Dr. Capitan uses in addition compresses moistened with solutions of corrosive sublimate in water of one-quarter to one-half per cent. strength, or of borated water, one to fifty.—*N. Y. Med. Jour.*

GASTRO-INTESTINAL INTOXICATION IN INFANTS.—Perrier (*Annales de médecine et de chirurgie infantiles; Riforma medica*) recommends in light forms, unaccompanied by general phenomena, such as vomiting, diarrhoea, tumid abdomen, stationary or diminished weight, the suspension of milk, substituting for it boiled water, or slightly alkaline water, rice water, barley water, etc. The following prescription should be given:

℞ Benzonaphthol, gr. 4½–9.
Salicylate of bismuth, gr. 7½–15.
Syrup of orange flowers, m 450.
Mucilage of acacia, m 1,350.

M. Sig. A teaspoonful every two hours.

If the dejecta are foetid, infrequent, and if there is tympanites, give:

℞ Calomel, gr. ¼–1½.
Sugar of milk, gr. 1½.

In those forms in which to the before mentioned symptoms are added fever, foetid breath, foul tongue, thirst and a loss of weight, milk should always be suspended, water alone being given. Gastric and in-

testinal lavage with boiled water or a seven-tenths per cent. saline fluid should be practiced; warm, moist compresses should be applied to the abdomen, and if there is hypothermia hot baths should be given, while tepid or cool baths should be used with hypothermia. Thirty cubic centimetres (about four hundred and fifty minims) of artificial serum should also be injected every three or four hours.—*N. Y. Med. Jour.*

ACUTE DYSENTERY.—Sandwith, of Cairo, advises the following treatment: The patient is to stay in bed with flannel over the abdomen, and placed on a diet of boiled milk, rice water and seltzer, plus a little whisky. A dose of salicylate of bismuth, 15 grains, is given every four hours. The intestine is washed out daily with a quart of boric acid and starch solution, and for a few days daily rectal injections are made with the following mixture:

℞ Cupri sulphat, gr. xv.
Tinct. opii, gtt. xv.
Amyli, ʒ j.
Aquæ, ʒ viij-Oij.

M. Sig. For one rectal injection.

A cocain suppository may be inserted afterward if indicated.—*North American Practitioner.*

TEMPORARY RELIEF OF TOOTHACHE. Ackland (*Treatment, Therapeutic Gazette*) recommends that the gum be dried and painted with the following formula:

℞ Iodine liniment, m j.
Tinct. aconite, m j.
Chloroform, m x.
M.—*Kansas City Med. Rec.*

INFANTILE CHOREA.—

℞ Acidi arseniosi, gr. iss.
Aq. dest., ʒ iiij.

M. Sig. From one-half teaspoonful to seven teaspoonfuls a day.

According to Filaton this is better tolerated than Fowler's solution or the arsenate of soda. Begin with one-half teaspoonful for a child of four to ten years, or one teaspoonful if over ten years; augment the daily dose during the first week, diminish it during the second, and so on. The maximum daily dose for the younger child is three and one-half teaspoonfuls, for the older double this quan-

tity. If not borne by the stomach, Filaton advises the use of Fowler's solution hypodermically in doses of $\frac{1}{16}$ to $\frac{1}{8}$ of a grain.—*Med. News.*

HEMICRANIA OF GASTRO-INTESTINAL ORIGIN.—The *Clinica Moderna* gives the following:

℞ Menthol valerianate, parts v.
Water, parts xxv.
Syr. capillaria, parts xxx.

M. Sig. Fifteen drops every two hours.

If the attacks are accompanied by contraction of the pupil use the following:

℞ Caffeine citrate,
Menthol, gr. viiss.
Quinine sulphate, gr. xv.

M. Divide into ten powders. One to be taken every two hours.

If the pupils are dilated a little ether may be inhaled.—*N. Y. Med. Jour.*

OX GALL IN CONSTIPATION.—The *Ther. Monat.* quotes *Le Monde Méd.*, for the statement that Pfaff speaks highly of ox gall in chronic constipation due to the weakened peristalsis of the small intestine. He uses it in pills coated with salol to hinder its absorption by the stomach. One to two grammes pro die are given before meals.—*The Dominion Med. Mon.*

CHLORHYDRATE OF COCAINE AND ITS SOLUTIONS.—M. C. Jonas (of Brussels). The following are a few personal observations made of these solutions and their preservation.

First solution:

℞ Chlorhyd. of cocaine, ctgrm. 0.25.

Distilled aq., gr. 10.

Keeps clear for four days; on the fifth day solution becomes charged with a very abundant magma.

Second solution:

℞ Chlorhyd. of cocaine, ctgrm. 0.25.

Pure glycerine, gr. 1.

Distilled aq., gr. 9.

Keeps clear for five or six days and ferments, but more slowly than the preceding solution; magma less abundant.

Third solution:

℞ Chlorhyd. cocaine, ctgrm. 0.25.
Boric acid, cent. 0.15.

Distilled aq., gr. 10.

Keeps clear longer than preceding; magma less intense.

Fourth solution:

℞ Chlorhyd. cocaine, ctgrm. 0.25.
Crystallized phenic acid, cent. 0.01.

Distilled aq., gr. 10.

Solution remains clear and unfermented for an indefinite time; no magma.

Fifth solution:

℞ Chlorhyd. cocaine, ctgrm. 0.25.
Salicylic acid, cent. 0.01.

Distilled aq., gr. 10.

Solution continues perfectly clear; no fermentation after two months' observation.—*Med. Times.*

CHLOROFORM FOR TAPEWORM. (*Giorn. Med.*) Carath has used chloroform in many cases as an anthelmintic; he recommends it for its prompt action and its almost entire freedom from untoward action. He uses it as follows:

Chloroform, iij-iv.

Syrup, xxxv.

One teaspoonful every two hours, beginning early in the morning, and one hour after the last dose, 25-30 grm. castor oil is given, the patient being on a bland diet. He claims to have thus cured cases which had resisted the action of felix mas, kosoo, etc.—*The Dominion Medical Monthly.*

ANTISEPTIC VAGINAL DOUCHE.—

℞ Naphthol α, 3.

Alcohol, 26.

Distilled aq., 1,000.

M.

Or:

℞ Betanaphthol, 5.

Alcohol, 30.

Aq. dest. calid., ad 1,000.

M.—*Allgemeine medicinische Central-Zeitung.*

PERICARDITIS IN BRIGHT'S DISEASE. Bosc (*Nour. Montpellier Méd.*) concludes an article on pericarditis in Bright's disease with the following treatment:

For the heart complication, dry cups with repeated injections of ether, the latter remedy being sufficient to control the dyspnoea.

For the underlying uræmia purgative enemata, wet cups over the kidneys and general blood-letting, fol-

lowed by intravenous injection of saline solution.

Not too much is to be expected from the above regimen, because the double intoxication of uræmia and the pneumococcus renders all hope feeble.—*Med. Rev. of Revs.*

HEMORRHOIDS.—

- ℞ Ext. hamamelidis virgin.,
Ext. hydrastis canadensis,
Tinct. benzoini comp., aa 16.
Tinct. belladonnæ, 4.
Ol. olivæ carbolisati (5 per cent.), 32.

M. Sig. Local application.—*Adler, Jour. de Méd. de Paris.*

VOLVULUS OF THE STOMACH.—Berg (*Centralb. für Chir.*) describes two cases of twisting of the stomach upon its axis, the diagnosis resting not only upon the symptoms which were present, but being confirmed by operation and the course of the trouble during convalescence. In both instances operation was performed with entire success. From the character of the lesion the name volvulus of the stomach seems a suitable one.—*Ex.*

ACUTE DIARRHŒA.—

- ℞ Sodium bicarbonate, 3 j.
Aromatic spirit of ammonia,
3 iij.
Comp. tinct. cardamom, 3 vi.
Cinnamon water, 3 vi.

M. Sig. Two tablespoonfuls every two or three hours.—*Yeo, Med. Rec.*

CEARIN A NEW OINTMENT BASE.—Issleib describes a new base for ointments, which he names cearin, and prepares as follows: One part of white carnauba wax and four parts of paraffin are fused together, and the mixture constantly stirred until cool. The white carnauba wax employed in the preparation of this new base consists of a mixture of 25 parts carnauba wax and 75 parts of ceresin which has been bleached. It has heretofore not been possible to obtain a white mixture which contained such a high percentage of carnauba wax. While it is true that mixtures of carnauba wax and beeswax, in any proportion, are readily bleached, their mixtures are totally unfit for pharmaceutical uses on ac-

count of a tendency on the part of the wax to become rancid. Bleached carnauba wax is found on the market in the form of snow white blocks, which, being saponified only with difficulty, are very permanent. It is of interest to note that wool fat contains two constituents common to carnauba wax, namely, carnaubic acid and carnaubyl alcohol.

Cearin prepared in accordance with the above formula presents the appearance of a snow white, fairly soft, ointment-like mass, of uniform consistence throughout. It possesses the necessary degree of chemical constancy to make it available as a substitute for ung. paraffini (petrolatum molle, U. S. P.). Ointment of potassium iodide without thiosulphate ointment of red mercuric oxide and ung. plumbi p. g. (ceratum plumbi subacetatis, U. S. P.), prepared with this base have remained unaltered for over one year.

The advantage of most importance that it possesses over the ung. paraffini is its property of mixing with and holding large quantities of water. While the incorporation of water to the extent of from three to five per cent. with ung. paraffini is only accomplished with much difficulty, in the case of cearin the incorporation of from 15 to 18 per cent. is accomplished with ease. This immiscibility with water on the part of ung. paraffini serves to limit its use for pharmaceutical purposes to a great extent and is the chief reason which has led to the employment of lanolin in its stead. An ointment base which possesses the property of assimilating 15 to 18 per cent. of water, as does cearin, therefore, fills an actual want. This is instanced in the case of ung. plumbi.—*Amer. Druggist and Phar. Rec.*

PHTHISICAL COUGH.—Murrell recommends the following in the hacking, irritable cough of phthisis, untended with much expectoration:

- ℞ Codeine, gr. iv.
Diluted hydrochloric acid, 3 ss.
Spir. of chloroform, 3 iss.
Syr. of lemon, 3 j.
Aq., ad 3 iv.

Make an emulsion. A teaspoonful frequently, when cough is troublesome.—*Gaillard's Med. Jour.*

TO RELIEVE NEURALGIA OF PHTHISICAL PATIENTS.—Capitan prescribes the following ointment. A very small quantity is lightly applied and the part covered with some impermeable material and absorbent cotton. The application must be discontinued as soon as the skin becomes even slightly reddened:

- ℞ Guaiacol,
Methyl. salicylatis, aa gr. 80.
Ext. belladonnæ, gr. 3½.
Ext. opii, gr. 4.
Vaselin,
Lanolin, aa 3 ½.

In very acute cases, menthol (15 grains), antipyrin (30 to 45 grains), or bromid of potassium (80 grains) may be added.—*Gaillard's Med. Jour.*

CHRONIC HYPERTROPHIC RHINITIS. Maraval (*Clinica moderna*) recommends saline irrigation of the nostrils to cleanse them, repeated several times daily. The congested condition of the mucosa is to be met with injections of a one to three per cent. solution of nitrate of silver, a five to twenty-five per cent. solution of trichloroacetic acid, or a one in thirty solution of chloride of zinc.

Immediate relief is sought by taking from time to time a pinch of the following snuff:

- ℞ Hydrochl. of cocaine, gr. 2¼.
Camphor,
Alum, aa gr. 1½.
Menthol, gr. ¾.
Sugar, gr. 1½.

N. Y. Med. Jour.

BORAX IN DYSMENORRHEA.—Borax is a most reliable remedy for painful menstruation with spasmodic contraction on the first day, with or without nausea or colic, or whether the subsequent flow is scanty or profuse. A powder of the sixth decimal trituration every night during the interval is generally productive of an easy period.—*Louisville Med. Mon.*

LOCOMOTOR ATAXIA.—

- ℞ Ferri lactatis, ʒ ii-iv.
Ext. cinchonæ, 3 i-ʒ iv.
Ext. nucis vomicæ, gr. v-xv.
Ext. gentianæ, q. s.

M. Ft. pil. xl. Sig. One or two as a tonic after three meals daily.
Erb, Med. Rec.

EXPECTORANT PILLS.—The following formulas are given in the *Cent. fur gesammter Therapie*:

- ℞ Terpin hydrate, gr. 45.
Powd. licorice, gr. 15.
Ext. of licorice, gr. 30.

M. ft. pil. No. 30. Sig. Two pills t. i. d.

- ℞ Morphine hydrochlorate, gr. j.
Ipecac, gr. iij.
Sulphurated antimony, gr. v.
Glycyrrhiza,
Sugar, aa gr. xxiv.

M. ft. pil. No. 30. Two pills t. i. d.
Gaillard's Med. Jour.

TYPHOID FEVER.—The four most important agents are feeding, sponging, some antiseptic, like aromatic sulphuric acid, and tincture of digitalis or caffeine. A happy result of this treatment is a more rapid convalescence than is secured when feeding is not crowded; but the course of the disease is not abridged in many cases.—*Carter, Ex.*

PAINFUL SWELLING OF THE UTERUS. In treating painful swelling of the cervical portion, Lutand (*Jour de med. de Paris*) applies the following:

- ℞ Tannin, 3 j.
Lycopodium, 3 iiss.
Europhen, 3 v.
Pulv. opii compos., gr. xv.

This is to be applied through a speculum and secured with a cotton tampon.—*Gaillard's Med. Jour.*

OINTMENT FOR ACNE.—According to the *Centralb. fur die gesammte Therapie*, von Hebra and Ullman recommend the following:

- ℞ Subnitrate of bismuth,
White precipitate,
Ichthyol, aa gr. 30.
Purified vaselin, gr. 200.

To be applied externally.—*Gaillard's Med. Jour.*

TO MASK QUININE.—

- ℞ Quininae sulphat., 4.
Acidi citrici, 10.
Syr. simp.,
Syr. aurantii flor., aa 10.
Aq. destillat., ad c.c. 20.

M. Sig. Ten drops in fifty grams of water. Add three grams of sodium bicarbonate and drink during effervescence.—*Ann. de Méd. et Chir. Inf.*

VAGINISMUS.—

℞ Cocaine hydrochl., ctgrm. 0.05–0.10.
Ol. theobromæ, grm. 5.

Or:

℞ Pulv. opii,
Pulv. belladonnæ, aa ctgrm. 0.03.
Ol. theobromæ, grm. 5.

Or:

℞ Morphine hydrochlorat, ctgrm. 0.02–0.06.
Ol. theobromæ, grm. 5.

Or:

℞ Iodoform, grm. 0.50–1.
Ol. theobromæ, grm. 5.

Each for one suppository.—*Labadie-Lagrave, Gaz. Hebdom.*

TO DESTROY LICE AND NITS.—The oil of sassafras will destroy all varieties of pediculi and their ova with a single application. Care must be taken to prevent its coming in contact with mucous membranes. Any burning from this cause can be allayed in a few minutes by pouring on olive oil.—*Louisville Med. Mon.*

LOCAL APPLICATION FOR URTICARIA.—The following local application is recommended in the *Gaz. hebdomadaire de méd. et de chir.*:

℞ Distilled aq., $\frac{3}{4}$ 14½.
Cherry-laurel aq., 3 12½.
Chloral, gr. 75.
Cocaine hydrochloride, gr. 135.
Gaillard's Medical Jour.

EGG-COGNAC.—Take the yolks of fifteen eggs, carefully freed from the white, and place in a quart bottle with ten ounces of Benedictine. Shake well and fill up the bottle with German cognac and shake thoroughly again. Or add thirty centigrams of vanilla bean to twenty grains of simple syrup and two hundred of cognac and let stand for an hour or more. Add the yolks of three eggs, beaten up with mucilage of gum Arabic into a foam and finally add water up to two hundred cubic centimetres.—*Zeitschrift f. Krankenpflege.*

TOOTHACHE.—

℞ Camphor vas.,
Chloral hydrat., aa gr. 75.
Cocain. hydrochlor., gr. 15.

M. Sig. To be introduced into the tooth cavity.—*Ex.*

DEAFNESS.—“In conclusion I would add a few words on some recent improvements in otology, one being the use of thiosinamin to be taken internally for the relief of deafness of the usual type. I have found it useful in some cases where not too far gone. Then again the introduction of yeast ferments into the middle ear by means of the syringe in cases of high degree of deafness seems to promise much in this generally hopeless field of investigation and practice.”—*Spalding, Jour. of Med. and Sci.*

TUBERCULOSIS IN CHILDREN.—

℞ Balsam of Peru, gr. 75.
Cod liver oil, 3 2½.
Powd. acaciæ, gr. 75.
Distilled aq., $\frac{3}{4}$ 2½.
Syr. of orange, 3 4.

Dose, teaspoonful every two hours after some nourishment.—*Schmey, Ex.*

NITRO-GLYCERIN AS A HEMOSTATIC IN HEMOPTYSIS.—According to the *Clinica moderna*, half a drop of a one per cent. alcoholic solution of nitro-glycerin in a little water, given every half hour, arrests intractable hemoptysis.—*Louisville Med. Mon.*

BURNS.—The following application quickly relieves the pain of superficial burns:

℞ Cocain, gr. v.
Camphoræ carbolat., $\frac{3}{4}$ ss.
M. et adde:
Ol. olivæ, $\frac{3}{4}$ ss.
Sig. Apply.—*Ex.*

NEURITIS.—

℞ Ammonium bromide, gr. xv.
Ammonium salicylate, gr. ij.
Sol. of potassium arsenite, m j.
Simple syr., m v.
Peppermint aq., 3 j.

This dose to be given every three or four hours.—*Pope, Ex.*

LUMBAGO.—

℞ Potassii iodidi, 3 ss.
Tinct. opii deod., 3 ij.
Spir. lavandulæ comp., 3 j.
Spir. ætheris nitrosi, $\frac{3}{4}$ ss.
Aq. destillatæ, $\frac{3}{4}$ xij.

M. Sig. Take two tablespoonfuls twice daily.—*Brodie, Ex.*

HEADACHE IN THE GOUTY.—

R. Potass. carbonat., $\frac{3}{4}$ iss.
 Ammon. carbonat., $\frac{3}{4}$ j.
 Tinct. serpentariæ, $\frac{3}{4}$ ss.
 Aq. camphoræ, $\frac{3}{4}$ iiii ss.

M. Sig. Add an ounce to half an ounce each of water and lemon juice and take twice or three times daily.
Ex.

THE MOSQUITO AS A FACTOR IN THE PRODUCTION OF MALARIA IN MAN.

The evidence in favor of contamination by suctional insects is strong and the belief that the mosquito can thus transmit the pathogenic element of malaria is every day gaining ground. Two years ago Manson produced in the human subject attacks of typical malaria by the imbibition of water inoculated from the bodies of mosquitoes which had bitten persons suffering at the time from malarial fever. Drainage of the soil causes mosquitoes to disappear. They fly near the ground, especially about pools; they are most active at night, all features that seem to associate this insect with malarial fevers. They are bred from the egg to the larvæ, from the larvæ to the nymphæ, from which emerge the young mosquitoes in marshy places; hence it is fair to assume they impregnate themselves with malarial germs. In the Roman malarial districts who protect themselves from the bites of insects suffer less than the laborers from malaria. In autumn after the rains the mosquito is very prevalent and so is the fever; both diminish at the same time.

We, fortunately, have in carbolic acid an excellent preventive agent against the mosquito. The use of a strong carbolic acid soap for washing purposes suffices when insects are not numerous; the stronger the odor of carbolic acid given off by the skin the better. In malarial regions, however, especially when mosquitoes are numerous, the protection must be increased in proportion. This can easily be done by dipping the hands, after the ablutions are over, into a bucketful of water containing an ounce of carbolic acid, and passing them, while wet, over the face, neck and ears—any portion of the body that may be exposed. If the points thus moistened are not wiped

the water will evaporate, leaving a thin film of carbolic acid over the skin, which thoroughly protects it until completely washed off by the perspiration. A bucketful of such a solution is sufficient for twenty. If resorted to before retiring the protection usually lasts during the sleeping hours.

When carbolic acid is not available an emulsion of common kerosene or petroleum is an excellent substitute, the fumes of the pure article being fatal to the mosquito. A few drops of petroleum held in any open receptacle a few inches under the insect causes the latter to drop dead.

The mosquitoes, their larvæ and nymphæ infecting small pools can easily be overcome by pouring into each sheet of water a quantity ranging from a few ounces to a pint of petroleum. This gradually spreads on the surface and the local supply of insects is, at least, greatly reduced. This plan, recently tried in New Jersey, has been found very effective.

A simpler method is that suggested by the *Public Health Journal*, which states the mosquito in all its phases may be killed by contact with the most minute quantity of potassium permanganate. A 1 to 1500 solution distributed in mosquito-haunted marshes or grasses will render the development of the larvæ impossible; while a handful of permanganate will oxidize a ten-acre swamp, kill its embryo insects and keep it free from organic matter for thirty days at a cost of 25 cents. A single pinch of permanganate has killed all the germs in a thousand-gallon tank.

As prophylactics against the attacks of insects and other disease breeding germs, the Zulus and the natives of many tropical countries anoint their bodies with fat. Hence the probable explanation of the prevalent value of an ointment containing $\frac{1}{2}$ drachm to the ounce of betanaphthol—which also greatly reduces the irritation caused by the bites and stings of any insect. It must be said, however, that the sensation produced by a coating of grease over the face in hot weather is anything but pleasant—at least for a white man.

TREATMENT.—For the treatment of mosquito bites the application of aqua ammoniæ may counteract the infectious principle, but this is doubtful, for it does not penetrate the tissues, as did the insect's bill. At any rate it reduces the suffering if applied with a little rag and left *in situ* a few moments.

Menthol sometimes affords considerable relief, the crystalline solid or camphoraceous substance being rubbed over the surface.

Neal highly recommends the following mixture for local applications:

℞ Pulv. ipecacuanha, 3 ss.
Spir. vini rectific.,
Ætheris, aa ʒ ss.

M.

Ottinger affirms that ammonia is of little benefit, and that the best results are obtained from the application of ichthyol. In numerous bites and stings of flies, gnats, bees, wasps, etc., he found that it quickly and surely caused the phenomena of inflammation—which he attributes to its vasoconstrictor action—to subside. It is best applied pure in pretty thick layer, though it may be used in the form of an ointment.

Morris also suggests painting the bites or stings with a saturated solution of either camphor or salol in ether; or a mixture of 30 grains each of salicylic and benzoic acids in 7 drachms of collodion, may be tried.

Brocq and Jacquet recommend the following as effective for the bites of fleas, mosquitoes, gnats, sand-flies, mites, etc.:

℞ Camphorated oil of chamomile, parts 100.
Liq. styrax, parts 20.
Peppermint essence, parts 5.

M. Apply.

When many bites have caused violent local tumefaction and congestion a cold lead-water poultice forms a very soothing application. Lemon juice is also useful.—*Monthly Cyclopædia of Practical Medicine.*

PURULENT CYSTITIS.—

℞ Acidi salicylici,
Acidi boracici, aa 5.
Aq. fervidæ, ad 1,000.

M. Sig. For irrigation of the bladder.—*Rabaw and Bourget, Memorabilia.*

ACUTE RHINITIS.—

℞ Carbolic acid,
Ammonia aq., aa 3 j.
Alcohol, 3 iv.
Aq., 3 iiss.

M. Sig. Inhale.—*Centralbl. f. d. ges. Therapie.*

EXCESSIVE TREATMENT IN DISORDERS OF INFANTS.—Prof. Neumann, of Berlin, gives the following warnings: 1. Do not bathe the infant and thus remove the vernix caseosa, which is itself aseptic. The first bath should be given after the navel wound has healed. Avoid too much cleansing of the mouth of the infant by rubbing and scrubbing it out. 3. Refrain from scarifying the gums with the idea that dentition is a pathologic process.—*Medical Council.*

TYPHOID.—

℞ Spir. terebinth. rect., 3 j.
Spir. juniper, 3 ss.
Ext. hamamelidis, fl., ʒ ij.
Pulv. acaciæ, ʒ iss.
Aq., q. s. ad ʒ vj.

M. Sig. Dessertspoonful every four hours.—*Christison, Ex.*

ACUTE DIARRHEA.—

℞ Sodium bicarbonate, gr. 80.
Aromatic spir. of ammonia, fl. 3 3.
Comp. tinct. of cardamons, fl. 3 6.
Cinnamon aq., fl. ʒ 6.

Dose, two tablespoonfuls every two or three hours.—*Louisville Med. Mon.*

MENTHOL COLLODION FOR CONTUSSIONS.—The *Jour. de M. de P.* says this is recommended by Prof. Name to soothe pain and accelerate recovery. After rigorous antiseptics and cleansing of the contused parts with ether, they are painted once or twice a day with a mixture 24–27 grams of collodion with 6–8 grams of menthol.—*N. Y. Poly.*

TENDERNESS OF THE GUMS.—

℞ Cocain. hydrochlorat., gr. ij.
Chloroform, m xv.
Glycerin, 3 vj.
Ess. rosar., gtt. vj.

M. Sig. Apply a small quantity to the painful portion of the gum.—*Ex.*

NEURASTHENIA.—

℞ Iron lactate, 3 2.

Iron arsenate, gr. 3.

Ext. of nux vomica, gr. 7.

Ext. of gentian, gr. 45.

Sig. Divide into 100 pills. Two pills to be taken three times a day.—*Ex.*

IODINE IN CHRONIC ECZEMA OF THE HANDS.—The *Revista de Medicina y Cirugia Practicas*, quoting the *Therapeutische Monatshefte*, attributes the following formula to Edlefsen:

℞ Iodine, gr. 1½.

Potassium iodide, gr. 4.

Glycerin, gr. 180.

M. To be applied every night and the hands covered with compresses. *N. Y. Med. Jour.*

HEPATIC COLIC.—Fagio (*Crónica médica*) recommends the following:

℞ Chloroform aq., *m* 1,350.

Neutral glycerin,

Orange-flower aq., *aa m* 300.

To be taken in three doses in the course of two or three hours.—*Ex.*

CATARRH OF THE UPPER AIR-PASSAGES.—

℞ Menthol, parts iv.

Eucalyptol, parts iiss.

Terpinol, parts ij.

Ol. Pinus Sylvestris, part j.

A few drops are to be poured into a bottle and the latter heated over an alcohol lamp. The bottle will be immediately filled with balsamic vapors, which the patient is to inhale. *Kafemann, Phila. Med. Jour.*

VULVITIS.—

℞ Liq. plumbi subacetatis, 3 j.

Tinct. hyoscyami, 3 ij.

Aq. camphoræ, q. s. ad 3 viij.

M. et ft. lotio. Sig. Apply constantly, tepid, with saturated cloth. *Waring, Ex.*

DIGITALIS IN PERICARDITIS.—Barginsky, in his Berlin clinic, has found sixty cases of pericarditis in children, of which twenty-four were of rheumatic origin. Careful percussion is necessary to diagnose the condition. It is rare to see a case of polyarthritic rheumatism without involvement of the heart, and the lesions of the pericardium are proportionate to the number of recur-

rences. Salicylic acid he has found to fail in these cases, but he has obtained good results, notably in the relief of dyspnea and edema by administering digitalis and diuretin.—*Sem. Med.*

LACTIC ACID IN GYNÆCOLOGY. Dalché (cited in the *Gazette hebdomadaire de médecine et de chirurgie*) on the theory that lactic acid is the natural antiseptic of the vagina, has made use of it in leucorrhœa, in the form of this solution:

℞ Lactic acid, parts 3.

Glycerin, parts 100.

M. Tampons soaked in the solution are packed in the vagina. He reports good results.—*N. Y. Med. Jour.*

URIC ACID DIATHESIS AND NEPHRITIC COLIC.—

℞ Lithii iodidi, 75.

Mucil. gum. tragac., q. s.

Ft. pil. No. 50. Sig. One pill three times a day.—*Ruhemann, Med. Rec.*

LABOR COMPLICATED WITH PLACENTA PRÆVIA.—After labor complicated with placenta prævia, the tincture of the chloride of iron in doses not exceeding 10 drops, well diluted, may be given with advantage. The following is also a useful prescription:

℞ Tartrate iron and potass, gr. 60.

Ext. nux. vom., gr. 3.

Scale pepsin, gr. 30.

In 30 capsules; one four times daily with food.—*Davis, Louisville Med. Mon.*

GRANULATING WOUNDS.—An ointment composed of 10 per cent. balsam of peru in vaseline, to which enough cocaine hydrochlorate to make 4 per cent. has been added, makes an excellent and most soothing dressing for painful granulating wounds.—*Louisville Med. Mon.*

BRONCHITIS.—In acute bronchitis with superabundant secretion:

℞ Acidi benzoici, gr. xv.

Acidi tannici, gr. xv.

Morphin. Hydrochlorat., gr. j.

M. Et. ft. pil. No. x.

Sig. One pill every two hours. *Osertos, El Siglo Medico.*

DIURETIC FOR CHILDREN.—

- ℞ Potassium acetate,
Potassium nitrate, aa gr. xv.
Oxymel of squill,
Comp. syr. of sarsaparilla, aa 3
iiss.
Inf. of juniper berries, ʒ ss—ʒ
iiss.

Sig. To be taken during the day.
Comby, Ex.

NEPHROLITHIASIS.—Dr. Charles G. Cumston, of Boston, Mass., in the *International Med. Magazine*, says that in the attempt to dissolve renal concretions by alkalines he has frequently ordered the following combination with apparently happy results:

- ℞ Sodii phosphat.,
Sodii bicarb., aa 45.0.
Lithii carbonat., 10.0.

D. in scatul.

Sig. A dessertspoonful dissolved in a glass of water thrice daily.

Danforth speaks most highly of the potassium citrate in the dose of two grammes every three or four hours, and the writer has prescribed it with good results as follows:

- ℞ Potass. citrat., 1.00.
Sodii bicarb., 0.50.
Lithii carb. efferves., 0.25.

In chart. No. I. D. tal. dos. No. xx.

Sig. Take four or five powders daily in a glass of water.

When there is pyelitis the writer has given urotropin, dose 50 centigrammes in water several times daily on account of its real antiseptic properties in the genito-urinary tract, or the following formula:

- ℞ Acidi benzoic.,
Natrii salicylat., aa 3.0.
Aq. chloroform, 90.0.

M. D. Sig. To be taken in four doses during the day.

For severe hæmaturia we have employed ferripyrin in several cases with a satisfactory outcome, combined as follows:

- ℞ Ferripyrin, 1.0.
Tinct. gentian. comp., 10.0.
Syr. cort. aurant., 90.0.

M. D. Sig. Take a dessertspoonful every two hours.

Or:

- ℞ Ferri albuminat., 0.25.
Acidi tannici, 0.05.
Sacchar. alb., 0.50.

In chart. No. I. D. tal. dos. No. xv.

D. Sig. Take three or four powders daily according to indications.

A cure at some mineral resort is really of some value and at these places the advantages of producing oxidation of uric acid by baths, strict attention to diet and a well-directed exercise, tend to have an excellent action.—*The Med. Bull.*

ELECTUARY FOR GOUTY RHEUMATISM.—

- ℞ Sodium salicylate, grm. 30.
Sodium nitrate,
Potassium iodide, aa grm. 20.
Colchicum oxymel, grm. 100.
Rob of lappa, gr. 300.

F. s. a. A tablespoon morning and night in half a glass of alkaline water. Continue for forty days.—*Bacelli, Jour. Amer. Med. Asso.*

TRAUMATIC RUPTURE OF THE URETHRA.—C. A. Ljunggren describes in the *Nordiskt Med. Arkiv.* his success in two cases of traumatic rupture of the urethra, one recent, the other old, with a stricture, abscesses and fistula, resulting from a fall astride a beam. In both there was a gap of several centimeters, which he filled by substituting the soft parts of the perineum sutured around a permanent sound and drained.—*Louisville Med. Mon.*

LINIMENT FOR NEURALGIA.—

- ℞ Ichthyol,
Mercurial ointment, aa 3 j.
Chloroform,
Spir. of camphor, aa 3 vj.

℞ Sig. Shake well before using and rub over the affected part.—*Eulenburg, Ex.*

BRONCHITIS (SUB-ACUTE).—

- ℞ Antikamnia (Genuine) 3 j.
Ammon. mur., 3 iiss.
Tinct. digitalii, 3 ij.
Aquæ dest., q. s. ft. ʒ iv.

M. Sig. Teaspoonful at a dose.
Louisville Med. Mon.

ANALGESIC.—

- ℞ Codeine sulphat., gr. xxxij.
Aromatic spir. of ammonia, 3
vj.
Whiskey, ʒ j.
Syr. of orange peel, ʒ iv.

Dose, from one to three teaspoonfuls once or twice daily.—*Jones, Ex.*

TEMPORARY RELIEF OF TOOTHACHE.
Ackland, *Ther. Gaz.*, recommends that the gum be dried and painted with the following formula:

- R Iodine liniment,
Tinct. of aconite, aa *m j*.
Chloroform, *m x*.

M.—*Louisville Med. Mon.*

FAVUS.—Pirogoff's ointment:

- R Potas. carbon., 8.
Flor. sulphur, 30.
Tinct. iodi.,
Picis liquid, aa 100.
Adipis, 200.

M. Ft. ungt.

The sulphur and tar in the ointment act as antiparasitics, the iodine removes the hairs, so that epilation is unnecessary. The ointment is to be spread on lint, of the thickness of a knife edge, and renewed daily. After the ointment has been used for a few days, a slight dermatitis is developed, which may be treated with Lassars' paste. The time of cure of favus in this manner is usually eighteen days.—*Pediatrics*.

TAPE WORM.—

- R Ol. tigllii, gtt. j.
Chloroform, gtt. xx.
Glycerine, $\frac{3}{4}$ j.

M. Sig. Give at night on empty stomach; on the following morning give a dose of castor oil.—*Med. Rec.*

TREATMENT OF PROSTATITIS WITH HOT WATER AND POTASSIUM PERMANGANATE.—Abeille, of Nantes, has been very successful with an original treatment of gonorrhœal prostatitis, which he describes as follows in the *Revue clin. d' And. et de Gyn.* After securing anæsthesia of the urethra with cocaine he introduces a Nelaton sound No. 12, and connects it with a reservoir containing potassium permanganate at 1 per 4,000 or 1 per 2,000, according to the ability of the urethra to support it, at a temperature of 35° to 38° C. The liquid passes through the sound up to the sphincter and flows out between it and the walls of the canal. When the penile portion is thus well irrigated, the sound is inserted through the sphincter, without interrupting the flow of the liquid, and the bladder receives the same cleansing. If there is a strong desire to urinate,

the urine can pass out through the sound. With this treatment Abeille has aborted many a case of prostatitis which would have supplicated if left to itself.—*Revue Internat de Med. et de Chir.*

TINCTURE OF IODINE IN ACUTE GASTRO-ENTERIC INFECTIONS.—Grosch uses the following formula in cases of acute infectious gastro-enteritis, accompanied by vomiting, purulent dejecta, pains in the head and limbs, etc.:

- R Tinct. of iodine, gtt. 15–18.
Simple syr., gr. 300.
Distilled aq., to make $\frac{3}{5}$.

M. One tablespoonful every one or two hours, or three times daily, according to the gravity of the disease.—*N. Y. Med. Jour.*

CHRONIC MYRINGITIS.—M. Stetter employs, as an external remedy:

- R Sozoidol, gr. iv.
Absolute alcohol, *m xv*.
Castor ol., 3 iiss.

M.—*St. Louis Clinique*.

THE CREOSOTE TREATMENT WITH CHILDREN.—Hock (*Wiener Med. Blat.; Centralbl. fuer Innere Med.*) uses creosote not only in tuberculosis but also for persistent catarrhal phenomena after measles and whooping-cough, according to the following prescription:

- R Creosote, gr. 15.
Cod liver oil, $\frac{3}{4}$ 3.
Sacch., gr. $\frac{3}{4}$.

M. Sig. From two teaspoonfuls to three tablespoonfuls to be taken daily.—*Ex.*

CONVULSIONS IN CHILDREN.—Simon gives purgatives after the following formula:

- R Sod. sulfur., 10.
Sennæ fol. pulv., 8.
Mel. commune, 21.
Aqua distill., 150.

M.

In children under two years of age enemata containing 10 grm. of Glauber salts in a mixture of olive oil and glycerine in 150 grm. of water, are to be administered. Simon also recommends the inhalation of ether, the use of mustard baths, and internally bromide of potassium and ether in sugar water.—*Jour. de med.*

GASTRIC NEURALGIA.—

- R Chloral, gr. ij.
 Sodii hyposulph., gr. v.
 Aq. menthæ pip., 3 j.
 M. Sig. One dose.—*Hare, Ex.*

SNUFF FOR OZENA.—

- R Powd. charcoal,
 Powd. cinchona, aa 3 iv.
 Powd. myrrh, 3 vj.
Louisville Med. Mon.

VOMITING OF UTERINE ORIGIN.—

- R Menthol, gr. vj.
 Elixir pepsinæ, 3 j.
 Tinct. opii, 3 ij.
Louisville Med. Mon.

EGGS IN THERAPEUTICS.—The *Medical Record* gives the following ways of using eggs in therapeutics:

A mustard plaster made with the white of an egg will not leave a blister.

A raw egg taken immediately will carry down a fish bone that cannot be gotten up from the throat.

The white skin that lines the shell of an egg is a useful application for a boil.

White of egg beaten with loaf sugar and lemon will cure hoarseness—a teaspoonful taken once an hour.

An egg added to the morning cup of coffee makes a good tonic.

A raw egg with the yolk unbroken in a glass of wine is good for convalescents.—*Ex.*

BRONCHITIS.—

- R Terpinol,
 Sodium benzoate, aa gr. ij.
 Milk-sugar, q. s.
 Sig. For one pill. From six to twelve to be taken daily.—*Ex.*

RELAXATION OF UVULA.—

- R Acid tannic, 3 ss.
 Glycerin, fl. 3 ij.
 M. Sig. Apply with a camel's hair brush.—*Hillier, Louisville Med. Mon.*

EPITHELIOMATA OF SLIGHT EXTENT.—

- R Resorcin, 3 ss.
 Potass. chlor., 3 iiss.
 Aq. dest., 3 x.
 M. Sig. Apply frequently as a wash.—*Brocq, Louisville Med. Mon.*

TINEA SYCOSIS.—

- R Sulphuris, 3 j-ij.
 Ol. rosæ, gtt. v.
 Vaseline, 3 j.
 M. Sig. Use locally.—*Louisville Med. Mon.*

ARTICULAR RHEUMATISM.—

- R Acidi salicylici,
 Ol. terebinthinæ, aa 10.
 Lanolin, 30.
 Ungt. parafini. 50.
 M. Sig. Apply externally.—*Ziemssen, Med. Rec.*

CROUPOUS CONJUNCTIVITIS.—

- R Acidi carbolic, 1.
 Cocainæ muriat, 0.3.
 Glycerini puri, 30.
 Sig. Apply externally.—*Samek, Med. Rec.*

LAXATIVE PILLS FOR CHILDREN.—

- R Ext. casc. sagrad, 2.
 Ext. frangulæ, 1.
 Pulv. aloes,
 Pulv. gentian, aa 4.
 M. ft. pil. No. 80. Sig. 1-4 pills at night.—*Pruys, Med. Rec.*

NERVE PAIN.—

- R Syrup thebaic, 50.
 Tinct. camphor, gtt 30.
 Chloral. hydrat., 2.
 Aq. chloroformi saturat, 120.
 Sig. Tablespoonful every two or three hours.—*Holz, Med. Rec.*

CHAPPED HANDS.—

- R Menthol, part 1.
 Salol, parts 2.
 Olive ol., parts 3.
 Lanolin, parts 80.
 Apply twice daily.—*Ritterband, Merck's Archives.*

ALPHA-NAPHTHOL IN TYPHOID FEVER.—Alpha-naphthol as a germicidal agent is three times as powerful as beta-naphthol. Has been used with decided advantage in typhoid fever in doses of from 7 to 15 grains. It is claimed to shorten the duration of the disease.—*Louisville Med. Mon.*

ANALGESIC IN MYELITIS.—

- R Ichthyol, 0.50.
 Aq. destil., 10.
 M. Sig. Inject one cubic centimetre every second day.—*Dujardin-Beaumonts, Med. Rec.*

CHRONIC PHARYNGITIS.—

℞ Acidi tannici, 2.
Aq. font., 200.
Spir. frumenti,
Syr. diacodii, aa 10.

Or:

℞ Alum, 3.
Aqua font., 200.
Syrupi, 20.

Sig. Use as a gargle.—*Schrotter, Med. Rec.*

BEER YEAST IN DIABETES.—The diet can be varied in diabetes if two or three tablespoonfuls of beeryeast are taken during the day at meals, disguised in beer or white wine (*Gas. Med. de Liebe*). It promotes assimilation and destroys the sugar derived from the food, while preventing the accidents that follow an exclusive meat diet. It is especially useful in cases in which the sugar is chiefly derived from the food, but is beneficial in all. It should be discontinued for a few days from time to time, or less taken every three or four days.—*Atlantic Medical Weekly.*

EPILEPSY.—

℞ Zinci oxidi, 0.3-1.
Ext. belladon., 0.1.
Pulv. rad. valerianæ,
Sacch. alb., aa 5.

M. f. pulv. Div. in dos. æq. No. x.

Sig: One powder t. i. d.—*Nothnagel, Med. Rec.*

OIL OF WINTERGREEN IN GYNÆCOLOGY.—At a meeting of the Paris Obstetrical and Gynecological Society M. Jouin reported that he had treated metritis and its various complications, but more particularly gonorrhœal endotrachelitis, by means of applications of oil of wintergreen, and with success. He stated that in some cases the medicament has found its way into the Fallopian tubes and cured old cases of salpingitis.—*N. Y. Med. Jour.*

TO DISGUISE THE TASTE OF QUININE.—

℞ Quinine sulphate, gr. iiss-x.
Syr. of rose leaves, 3 j.

The syrup of rose leaves is made by mixing one part of the fluid extract of *rosa centifolia* with three parts of simple syrup.—*Gates, Med. Rec.*

TO MAKE PLASTER-OF-PARIS SET RAPIDLY.—It has been found by experiment that where it is of importance to make plaster-of-Paris set rapidly it should be mixed with a 5 per cent. solution of common salt, and this may be made roughly by adding a tablespoonful of salt to a pint of water.—*Ex.*

PUTRID BRONCHITIS.—

℞ Ol. terebinthin, 0.5-2.
Aquæ dest., 100.

Or:

℞ Aquæ picis, 5-50.
Aquæ dest., 100.

Or:

℞ Acidi, carbolic, 0.5-1.
Aquæ dest., 100.

Sig. For inhalation.—*Nothnagel, Med. Rec.*

BRONCHITIS.—

℞ Creosot., 8.
Sapon. amygdal., q. s.

Ft. pil. No. 80. Sig. 8 to 10 pills daily.—*Lyon, Med. Rec.*

STRYCHNINE IN ASPHYXIA NEONATORUM.—Dr. Henry S. Fry (*American Journal of Obstetrics; Clinical Review*) recommends from practical experience hypodermic injections of $\frac{1}{16}$ of a grain of strychnine, on the principle that it is our most powerful remedy in surgical shock, and should therefore be equally valuable in the grave form of asphyxia neonatorum, which is really a form of shock.—*N. Y. Med. Jour.*

OBSTINATE CASES OF HERPES.—

℞ Boric acid, 3 ij.
Absolute alcohol, 3 j.
Rosewater, 3 vj.

Dilute with equal parts of boiling water and use as a lotion several times a day.

℞ Calomel, gr. xx.
Bismuth subgallate, gr. xxx.
Bismuth subnitrate, 3 j.

Use as a dusting powder.—*Oppenheimer, Med. Rec.*

OZÆNA.—

℞ Creosoti, 5.
Alcoholis (70 per cent.), 10.
Glycerini puri, 40.

M. Sig. Apply with tampon to crusts.—*Ferreri, Archivio Italiano di Laringologia.*

CATARRHAL JAUNDICE IN CHILDREN.
Dr. Comby recommends the following treatment for this condition:

1. Absolute milk diet.
2. Calomel, 1-6 grain three times a day during one week.
3. An enema every morning with warm water.
4. On discontinuing the calomel, one powder three times a day of the following combination:

R Sodium bicarbonate,
Calcined magnesia,
Benzo-naphtol, aa gr. iiss.
Powd. nux vomica, gr. j-vj.

Louisville Med. Mon.

STRYCHNINE IN ALCOHOLIC NEURITIS.—E. R. Houghton (*Med. Rec.*) cites the case of a young man suffering from alcoholic neuritis for which he was treated ineffectually for over a month. Finally he was put on 1-10 grain strychnine four times a day, and improvement began at once. Two weeks after this treatment was begun the patient was about on crutches, and in two weeks more walking about. At the present time (two years later) he is entirely well. *Merck's Archives.*

BURNS.—The *Gaz. hebdomadaire de med. et de chir.*, credits the following to Lucas-Championniere:—

R Retinol or vaseline, parts 400.
Ol. of thyme,
Ol. of origanum,
Ol. of vervain,
Ol. of geranium, aa part j.
Sodium naphthol (microcidine)
parts iv-xij.

M.—*Louisville Med. Mon.*

KENKLE'S VEGETABLE WORM SYRUP.—Upon examination we find that it is put up in an oval green bottle, containing 4½ fluid ounces of an opaque, yellowish-brown, thin, syrupy liquid of slightly acid reaction. According to our examination each bottle contains:

R Santonine, gr. 27.
Ol. sassafras, m i.
Alcohol,
Fl. ext. pink-root, aa fl. ¾ 2.
Fl. ext. dandelion, fl. ¾ ¾.
Fl. ext. golden seal, fl. ¾ ¼.
Molasses, fl. ¾ ¾.

The santonine in a finely triturated condition.—*Louisville Med. Mon.*

CHRONIC MALARIA.—For the cleansing of the chylopoietic system in chronic malaria do not use calomel or blue mass, but reserve their use for the acute forms of malaria. The aloin, belladonna, strychnine and ipecac pill, cascara sagrada mixture, or one of the following will give good results:

R Magnesia sulph., ¾ iij.
Ac. sulphuric dilut., 3 iij.
Ext. licorice, 3 j.
Boiling ac., Oj.

M. Sig. Two or more teaspoonfuls with water.

R Podophyllin, gr. j.
Leptandrin, gr. ij.
Iridin, gr. j.
Ext. nux vom., gr. ij.
Capsicum, gr. j.

M. Ft. pil. 40. Sig. One or two three times a day.—*Louisville Med. Mon.*

ANALGESIC.—

R Antikamnia (genuine) 3 j.
Caffeine cit., gr. iij.

M. ft. caps. No. xii (dry). Sig. One every hour or two.—*Louisville Med. Monthly.*

LOCAL INFLAMMATIONS.—The *International Jour. of Surg.* says: In place of the old fashioned lead lotion use Burow's solution, which is more efficient and agreeable. Its formula is as follows:

R Acetate of lead (crystallized),
3 iij.
Alum, ¾ j.
Aq., ¾ xij.

Mix well and filter and before use dilute with four parts of water. Compresses of gauze soaked in this solution are very serviceable in the treatment of local inflammations, subduing swelling and alleviating pain.—*The Med. Bull.*

ANÆMIA.—

R Antikamnia, quinine and salol tablets, No. xxiv.

Sig. One four times a day.—*Louisville Medical Monthly.*

MYRINGITIS CHRONICA SICCA.—

R Acidi sozoiod., 0.25.
Alcohol abs., i.
Ol. ricini, 10.

Sig. External use.—*Stetter, Med. Rec.*

DIPHTHERIA.—

- ℞ Quin. sulph., gr. 24.
 Potass. chlorat., gr. 96.
 Tinct. ferri chlor., 3 2.
 Syr. zingiberis, 3 2.
 Aq., q. s. ad 3 6.

M. Sig. One dram in water every two hours for a child of six to ten years.

- ℞ Potass. chlorat., 3 ij.
 Acid. hydrochloric, 3 (1)j.

M. et adde:

- Tinct. ferri chlorid., 3 iv.
 Aq. dest., q. s. ad 3 viij.

M. Sig. One dram every two hours.

- ℞ Acidi lactici, 3 ij.
 Aq. dest., 3 v.

M. Sig. Apply by means of a spray or mop. (To dissolve the exudation).—*Louisville Med. Mon.*

NITROGLYCERIN.—It is an excellent stimulant in syncope, in threatening heart failure, or collapse from various causes; in acute lobar pneumonia, used early enough and boldly enough, it may render venesections unnecessary, and its skillful use often aids recovery from apparently desperate conditions. It is useful in chronic interstitial nephritis, in conditions of arterial fibrosis and atheroma, in gout and rheumatoid arthritis, and sometimes in anæmia, chlorosis and the anæmia of tuberculosis. In the management of cases of muscular and valvular diseases of the heart it finds a wide field of usefulness; in dilatation it may be used with digitalis; in fatty heart it may be used without any other drug; in case of mitral lesion it may be conjoined with digitalis, strophanthus, spartein and the like; in cases of aortic lesion, atropin, strychnin and caffeine may be used with it.—*Phila. Poly.*

LARYNGITIS.—

- ℞ Ichthyol, part j.
 Distilled aq., parts ix.

Spray with an atomizer and inhale.
Lange, Merck's Archives.

HYSTERIA.—

- ℞ Camphor. monobrom.,
 Ext. valerian, aa 3.
 M. Ft. pil. No. xxx. Obduc. fol. argent. Sig. One pill three times a day.—*Krafft-Ebing, Med. Rec.*

INSTANT RELIEF OF AFTER PAINS.

According to Winterburn, in many cases a nice warm meal is better than any medicine; still, where the pains are exhaustingly severe, I turn to amyl nitrite. This potent drug is a very efficient controller of after pains, and, used cautiously, I see no reason to apprehend harm from it. A neat way of using it is to saturate a small piece of tissue paper with 5 or 6 drops, stuff this into a two-drachm vial and request the patient to inhale the odor when she feels the pain coming on. It acts with magical celerity.—*Louisville Med. Mon.*

CHAFING.—

- ℞ Sozoidole-potassium,
 Petrolatum, aa part j.
 Lanolin, parts viij.

Apply.—*Schwartz, Merck's Archives.*

NEURALGIA.—The *Clinica Moderna* recommends the following:

- ℞ Ext. cannabis indica, gr. 7½.
 Salicylic acid, gr. 75.

M. Sig. Make into ten powders. Two or three powders to be taken daily.—*N. Y. Med. Jour.*

WHOOPIING-COUGH.—

- ℞ Bromoform, gtt. 40.
 Rectified Spirit, fl. 3 4.
 Distilled water, fl. 3 1.
 Syr. tolu, q. s. ad fl. 3 3.

M. Sig. One fluid ounce in water every three hours.—*Monatsh, Louisville Med. Mon.*

VOMITING.—Deying and Bricemaret have found that a tincture of Iceland moss (one part of moss to five of eighty per cent. alcohol) was markedly efficacious in arresting vomiting in numerous cases in which emesis resulted from various morbid states. The dose given was from thirty to fifty drops. The authors have not had the opportunity of trying the remedy in the sickness of pregnancy.—*Ex.*

ALOPECIA.

- ℞ Acidi salicylici, 2.
 Spir. vini, 100.
 Spir. lavand.,
 Spir. coloniensi, aa 50.

M. Sig. Apply to affected region twice daily.—*Kaposi, Med. Rec.*

URIC ACID DIATHESIS.—Dr. N. A. Olive, of Waco, Texas, says in the *Texas Medical Journal* that the following has been useful in his practice:

R Acid. salicylic., 3 iij.

Potass. acet., 3 v.

Aq. dest., q. s. ʒ iv.

M. Ft. sol. Sig. Take a teaspoonful in water every four hours. *Med. World.*

HEMORRHAGE IN TYPHOID FEVER.

After a hemorrhage has taken place the blood as a rule is not all expelled, and part remains in the colon or at the ileocaecal valve. Blood is a fruitful soil for the development of bacterial growth, and if allowed to remain aids in the further development of the poison. Do you think any harm will come to the patient by these clots being washed out? Instead of giving opium or any other drug to bind up the bowels and secretions, I have been in the habit for the past few years of following an entirely opposite course. I give something to move the bowels, generally a saline, and wash out the colon with ice water. By this plan I clear out the alimentary canal, carry off the clots of blood and whatever other substance there may be, relax all tension upon the bowel; and I have not had much secondary hemorrhage to contend with.—*McCormick, The Therapeutic Gazette.*

EPITHELIOMA.—

R Acidi arseniosi, ʒ.

Alcoholis,

Aq. dest., aa 75.

M. Sig. External use.—*Badal, Med. Rec.*

HEMORRHAGE.—An able surgeon never fears *hemorrhage* from an open wound. It is in them a frank enemy. Concealed hemorrhage is the thief that comes in the night. In large dissections ligate the larger central vessels in the wound so far as possible, and many bleeding points may be checked by a single ligation. *Keen, Ex.*

BOILS.—

R Ungt. stramonii,

Ungt. resin, aa p. æ.

Med. Rec.

TREATMENT OF URÆMIC ATTACKS.

Use hypodermoclysis provided the symptoms are not pressing and there is no trouble with absorption because of oedema; when the danger is pressing, or oedema is present, even in a very slight degree, use intravenous injection. In a large proportion of cases the patient should be bled, particularly if nervous excitement or convulsions are present or threatened, because this will relieve cerebral congestion, and aid in the elimination of toxins and in the absorption of the fluid from the subcutaneous tissues; or if intravenous injections are used, it will make room, so to speak, for the artificial serum. I believe this is of importance, unless the circulation is evidently very feeble from profound debility and anæmia. Again it is of great importance to aid sweating by the use of the hot pack, using care that heat stroke is not produced; but this again should not be used unless the patient fails to sweat, nor if he has a feeble heart.—*Hare, The Therapeutic Gazette.*

PHTHISIS.—

R Guaiacoli carb.,

Ammon. sulphoichthyol, aa xv.

Glycerin pur., xxx.

Aq. menth. piper, x.

M. Sig. Twenty to thirty drops t. i. d.—*Goldman, Münchener med. Wochenschrift.*

PRURITUS.—

R Menthol, 3 j.

Simple cerate, ʒ ij.

Ol. of sweet almonds, ʒ j.

Carbolic acid, 3 j.

Powd. zinc oxide, ʒ ij.

M. Sig. Apply night and morning.—*Kelsey, Med. Rec.*

BROW AGUE.—

R Antikamnia Tabs., (5 gr.) No. xii.

Sig. One every hour or two. *Louisville Med. Mon.*

TOOTH POWDER FOR CHILDREN.—

R Magnes. carb., v.

Cret. alb.,

Sodii salicyl., aa xv.

Ol. menth. pip., gtt. vi.

M. Sig. Tooth powder.—*Monti, Med. Rec.*

THE PRESCRIPTION

Therapeutic Cullings.

HEMORRHAGE.—

- ℞ Ol. terebinth, 3 iij.
Ext. digitalis fl., 3 ij.
Mucil. acaciæ, ʒ ss.
Aq. menth. pip., ʒ ij.

M. Sig. Dose, one dram every three hours. (In passive hemorrhage.)

- ℞ Acid gallici, gr. xv-xxij.
Syr. opil, 3 j.
Syr. aurant. amar. cort., ʒ ij.
Aq. destillate, ʒ ij.

M. Sig. Dose, one dram every hour. (Hemorrhage from bladder.)

- ℞ Ferri sulphat., gr. xv.
Solve in:
Aq. destil., ʒ iiss.
Dein adde:
Cocain, hydrochlor. (10% solution), 3 iiss.

F. s. a. External use. Sig. Inject twenty minims to one dram into each tonsil, and no bleeding follows extirpation of the glands.—*Louisville Med. Mon.*

PHENOCOLL IN MALARIA.—In the *American Gynecological and Obstetrical Journal* Dr. Cesare Mondini, of Brooklyn, publishes a note relative to the value of phenocoll in malaria. The physiological and therapeutic powers of the drug have been studied by Professors Mosso, Albertini, Cervello and Golgi. Upon the basis founded by these investigators Dr. Mondini has tried phenocoll in all the febrile conditions which he had diagnosed as of malarial origin. The salt which he employed in all cases was the hydrochlorate. The doses prescribed varied from $1\frac{1}{2}$ grammes (nearly 24 grains) to 2 grammes (about 30 grains) daily for children. The results were brilliant. Sometimes the amelioration was tempor-

ary and in some cases the effects were negative. He had, however, made use of phenocoll in over a hundred cases and met with but few failures. These were due less to the action of the drug, he thinks, than to the manner in which it was used. Dr. Mondini appended brief memoranda of several typical cases treated by phenocoll, one in particular being that of a child, 5 years of age, who had suffered from malarial intoxication for a year and who had an enormous splenic tumor. He was rebellious to quinine, but was cured by phenocoll.—*Med. Bull.*

OXYURIDES IN CHILDREN.—Monti recommends the following:

- ℞ Senna pods,
Leaves and dried flowers of tansy, aa gr. 180.
Water enough to make, after boiling fifteen minutes, a decoction, ʒ 2½.

Add:

Sulphate of magnesium, gr. 30-45.

Syrup of manna, gr. 300.

Half of this amount to be taken at one time, and the other half next morning.—*Medical Council.*

BEEF ESSENCE.—Cut up in small pieces one pound of lean beef from the sirloin or rump and put in a covered saucepan with half a pint of cold water; place by the side of the fire for four or five hours. Skim well and serve.—*Louisville Medical Monthly.*

ACUTE OTITIS.—Solt's formula is:

- ℞ Ichthyol, gr. xv.
Glycerin,

Aq. dest., aa 3 ij.

M. Sig. Instil several drops thrice daily into the ear.—*Le Progrès Médical.*

BRONCHITIS.—

℞ White oxide of antimony, gr. xv.

Tinct. of aconite root, gtt. xx.

Tinct. of belladonna, gtt. x.

Tinct. of nux vomica, gtt. x.

Syr. of ipecac, ℥ ss.

Syr. of opium, ℥ ss.

Infusion of linden flowers, ℥ v.

Sig. Tablespoonful every hour. Discontinue in case vomiting occurs. *Louisville Med. Mon.*

NOURISHING SOUP.—Stew two ounces of the best well-washed pearl sago in a pint of water till quite tender and very thick; then mix with half a pint of good boiling cream and the yolks of two fresh eggs. Blend the whole carefully with one quart of essence of beef. The beef essence must be heated separately and mixed while both mixtures are hot. A little of this may be warmed up at a time.—*Louisville Med. Mon.*

SCROFULOSIS.—In scrofulous affections of the glands, skin and mucous membranes Saint-Philippe finds the iodide of arsenic of great value. He prescribes in the following form:

℞ Iodide of arsenic, gr. vij.

Distilled water, ℥ iss.

Dissolve and give 5, 10, 20 or 30 drops of this solution a day, according to the age of the child.

As the remedy is an active one, it is wise, in his opinion, to commence with a small dose—for example, only a drop may be given morning and night, and this dose gradually increased.—*Therapeutic Gazette.*

GENERAL TONIC.—

℞ Strychninæ sulphatis, gr. $\frac{1}{10}$.

Acidi phosphorici diluti, m 5.

Ferri phosphatis,

Quininæ bisulphatis, aa gr. i.

Glycerini, 3 ss.

Elixir aurantii, q. s. ad ℥ ss.

M. et ft. sol. Sig. Take before each meal.—*Anderson, Med. Rec.*

IODINE HYPODERMICALLY IN PULMONARY TUBERCULOSIS.—C. W. Ingraham states that iodine, hypodermically administered, systematically and continuously, for a sufficient length of time and in proper dosage, in the incipient stages of tuberculosis, will effect a cure or healing of

the pulmonary disease. For the last five years he has used the following formula:

℞ Iodine, gr. $\frac{1}{2}$.

Bromine, gr. $\frac{1}{4}$.

Phosphorus, gr. $\frac{1}{10}$.

Thymol,

Menthol, aa gr. $\frac{2}{3}$.

Sterilized ol., 3 j.

The initial dose of the above formula is fifteen minims, while the maximum daily dose is one fluid-drachm. The injections are never given oftener than once daily. The injections should be made principally in the shoulders, as less soreness develops there than in other parts.—*The Post-Graduate.*

PULMONARY TUBERCULOSIS.—

℞ Ammonii sulphoichthyolatis,

Creosoti carbonat., aa grm. xv.

Glycerini puri, grm. xxx.

Aq. menth. pip., grm. x.

M. Sig. Twenty drops after each meal, increased to thirty drops, in a little wine or water containing lemon juice; children, ten drops gradually increased to twenty.—*Goldman, Wiener klin. Woch.*

CHOLERA INFANTUM.—A favorite prescription and one which I have used with the best results is as follows for a child from ten to eighteen months old, the quantities to be increased proportionately:

℞ Salol, gr. iiij.

Pepsin (pure),

Pancreatin (pure), aa gr. iiss.

Bis. subnit., gr. iiij.

Ext. nucis vom., gr. ss.

Sodii bicarb., gr. vj.

Ginger powd., gr. iss.

M. et div. in chart. No. xii. Sig. One every two hours.

Alternating with this about 3 ss of mist. cretæ.—*Trebridge, Buffalo Med. Jour.*

SUBCUTANEOUS INJECTION FOR HÆMOPTYSIS.—

℞ Ergotin, 5.

Morph. muriat., 0.04.

Antipyrini, 1.5.

Sparteinae sulph., 0.2.

Atropinae sulph., 0.002.

Aq. destil., q. s. ad 10.

M. Sig. One hypodermatic every half or quarter hour up to five.—*Capitan, Med. Rec.*

BLEPHARITIS MARGINALIS.—

℞ Sulphuris, gr. iij.
Resorcini, gr. iiss.
Petrolati, 3 iss.

Sig. Apply morning and night after removal of crusts. Indication: For squamous variety.

℞ Sodii boratis, gr. viij.
Aquæ destillatæ, fl. 3 j.

Sig. Apply freely to margin of lids. Indication: To remove crusts and scales.

℞ Hydrargyri oxidi flavi, gr. j.
Olei amygdalæ expressi,
Aquæ destillatæ, aa m x.
Lanolini, 3 ij.

Sig. Apply to margin of lids night and morning. Indication: For eczematous forms.—*Dominion Med. Mon.*

MERCURIAL OINTMENT INTERNALLY IN SYPHILIS.—Silberstein, of Hamburg (*Ther. Monat.; Wiener klin. Rundschau*) considers this treatment much simpler than that by inunction and equally efficacious with the painful injection treatment. He gives the following formula:

℞ Mercurial ointment, gr. 22.
Powd. licorice, gr. 75.
Glycerin, gtt. 5.
Mucilage of gum Arabic, q. s.

M. Divide into sixty pills. Two to be taken twice a day. The mouth must be kept scrupulously clean. After a week or two the use of the pills is to be resumed. [We are not told how long it is to be continued at first, but presumably it is till the sixty pills have been taken, a period of fifteen days.] During the treatment fatty food may be eaten freely. *N. Y. Med. Jour.*

ANTI-NEURALGIC POWDERS.—

℞ Quinine hydrobrom., gr. xv.
Ext. nucis vom., gr. liij.
Phenacetine,
Exalgin,
Pulv. ipecac et opii, aa gr. vj.

M. Ft. pulv. No. vi. Sig. Two powders a day, before meals.—*Louisville Med. Mon.*

ACUTE ANGINA OF INFANTS.—

℞ Acid. carbol. cryst., gr. xv.
Glycerini, 3 iss.
Ol. thymi, gtt. ij.
Aq., 3 xvj.

M. Sig. Irrigate pharynx.—*Marfan, Med. Rec.*

INDICATIONS FOR OPERATION IN APPENDICITIS.—J. T. Howell, M. D., gives the following indications for operating in appendicitis:

1. If the patient looks ill and there is vomiting and tympanites with a rapid pulse.

2. If patient looks ill and there is vomiting, even though pulse and temperature are each under 110.

3. If patient looks ill and pulse is over 110.

4. If there be rapid and feeble pulse and extreme tenderness in the right iliac fossa.

5. If pain and tenderness, at first localized, tend to become general, even though other symptoms may be absent.

6. If local pain and tenderness continue more than two weeks without diminution.—*Louisville Medical Mon.*

BOILS.

℞ Argenti nitratis, gr. xv.
Aquæ destillatæ, fl. 3 ij.

M. Sig. Apply freely with camel's-hair brush. Indication: Used to abort formation.

℞ Chloralis, 3 iv.
Glyceriti boroglycerini, fl. 3 j.
Aquæ, q. s. ad fl. 3 iv.

M. Sig. Apply constantly to inflamed area on absorbent cotton saturated with the lotion. Indications: In early stage used to abort formation, and in later stages to relieve pain and limit extent of suppuration.

℞ Alumini acetatis, 3 j.
Aquæ, fl. 3 iv.

M. Sig. Apply constantly on absorbent cotton saturated with the lotion. Indication: Used in papular stage to abort.—*Dominion Medical Monthly.*

FLATULENCE.—

℞ Ol. cajuputi,
Tinct. lavand. comp., aa 3 ss.
Mucil. acaciæ, ad 3 ij.

Sig. Dessertspoonful when necessary.—*Louisville Med. Mon.*

TO ABORT CARBUNCLES AND BOILS.

℞ Soot. cochl. parv.,
Sod. chlor. cochl. parv., aa j.
Yolk of one egg.

M. Ft. past. Sig. Apply to part on a piece of gauze.—*Louisville Med. Mon.*

SKIN DISEASES.—

℞ Pulv. bismuth subnit., 3 ss.
Ungt. aq. rosæ, ʒ j.

M. Sig. Apply night and morning. (In eczema of the scalp.)—*Van Harlingen*.

℞ Acid boracic, gr. xv.
Pulv. acaciæ, ʒ ij.
Ol. vaselini, fl. 3 viiss.
Aq., fl. 3 xv.

M. Sig. Apply locally. (In eczema.)—*Knaggs*.

℞ Liq. plumbi subacetat., fl. ʒ j.
Glycerinæ,
Aq., aa fl. ʒ iv.

M. Sig. To be applied two or three times a day with a camel's-hair brush. (In infantile eczema.)—*Smith, Louisville Med. Mon.*

SALICYLIC ACID IN PNEUMONIA.—

Dr. de Becker has found salicylic acid a valuable agent in pneumonia, believing that it acts on the inflammatory process in the lung and shortens the attack or abates it. It is an antiseptic and dissolves the fibrinous coagulum. When expectoration is induced he diminishes or stops the drug. He gives a child one-tenth grain hourly, a very small child even smaller doses. The aged are treated in same manner. Extreme weakness and cardiac troubles are contra-indications for its use.—*The Southern Clinic*.

PURIFYING THE AIR IN A ROOM.—In order to purify the atmosphere of the room inhabited by a phthisic patient the following may be plentifully and frequently sprayed:

℞ Guaiacol, 10.
Eucalyptol, 8.
Carbolic acid, 6.
Menthol, 4.
Thymol, 2.
Ol. of clove, 1.
Alcohol (95%), 170.

Mix and dissolve.—*Louisville Med. Mon.*

ASTHMA.—

℞ Sodii iodidi,
Tinct. stramonii, aa ʒ iss.
Ext. glycyrrhizæ, 3 j.
Syr. scillæ, ʒ j.
Aq. dest., ʒ vij.

M. Sig. One tablespoonful three or four times a day.—*Louisville Med. Mon.*

COLORLESS IODINE.—Dr. Holcomb, of Maysville, Ark., says: "A question, 'How to make colorless iodine,' was asked in a recent number of the *Lancet-Clinic*, and remains unanswered. As it does not seem to be generally known, I will give a formula which will make iodine as clear as water:

℞ Iodine, ʒ i.
Carbolic acid, gtt. 20.
Aqua ammonia, gtt. 40.

[Combine tincture of iodine with sulphite of soda will give a colorless liquid. So also with lime or lime water. In one or the other of these ways the physician will often find such applications or administrations very practical and useful.—Ed.]—*Am. Med. Jour.*

HEMATURIA.—

℞ Acid. gallici, 3 j.
Acid. sulphur. dil., 3 ss.
Tinct. opii deod., 3 j.
Inf. rosæ comp., ʒ iv.

M. Sig. Dose, one-half ounce every four hours or oftener.

℞ Ol. terebinthinæ, 3 xij.
Magnesii sulph., ʒ j.
Pulv. uvæ ursi, ʒ ij.
Aq. camphoræ, 3 viij.

M. Sig. Shake well. Dose, one ounce every two hours.—*Louisville Med. Mon.*

UREA IN CIRRHOSIS.—There is a benign form of cirrhosis of the liver with ascites, in which urea acts as a diuretic and removes the fluid. In severe forms little is to be hoped from the remedy, even when as much as an ounce is given daily.—*Dion, Med. Rec.*

HEADACHE.—Five grains of the sulphite of soda three or four times a day will cure those cases of headache where the tongue is broad and pale and covered with a yellowish white coat.—*Med. Summary*.

TUBERCULOSIS IN CHILDREN.—

℞ Balsam Peruvian, 5.
Ol. jecur. aselli, 10.
Gum Arabic, 5.
Aq. dest., q. s. ad emulsio 80.
Syr. aurant. cort., 20.

M. Sig. A teaspoonful every two hours after some nourishment.—*Louisville Med. Mon.*

BRONCHITIS.—

R Syr. terebin,
Syr. tolu, aa $\frac{3}{4}$.
Sodii benzoat.,
Aq. lauro. cerasi, aa 3 2.

M. Sig. Tablespoonful every four hours.

Chronic:

R Ext. eucalypt., $3\frac{6}{4}$.
Ammon. muriat.,
Ext. glycyrrh., aa $3\frac{1}{2}$.
Syr. tolu, $\frac{3}{4}$.

M. Sig. Teaspoonful every two hours.—*Louisville Med. Mon.*

PUERPERAL GLYCOSURIA.—Keim (*Le Progrès Méd.*) in a recent paper before the Obstetrical Society of Paris, says that glycosuria occurs only exceptionally during pregnancy and when present it is due to auto-intoxication, which may lead to eclampsia. During the puerperal state, on the other hand, glycosuria is almost present. Keim found it in twenty cases out of twenty-five. Nearly all cases appear with the establishment of the secretion of milk. A few cases which are present before the milk is formed are probably due to the act of labor itself.—*Med. Rev. of Revs.*

DIABETIC ALBUMINURIA.—

R Sodii arseniat., 0.05.
Potassii iodidi, 5.
Aq. destil., 300.

M. Sig. Tablespoonful before each meal.

Or:

R Ext. quiniæ (P. G.), 0.05.
Quiniæ sulph., 0.1.
Pulv. nuc. vomic., 0.02.

M. ft. pil. Sig. To be taken with meals.—*Conrad, Med. Rec.*

SODIUM CHLORATE IN GASTRIC AFFECTIONS.—Gastric affections treated with chlorate of sodium in daily doses of from five to eight grm. (75-120 gr.) are said to be usually much benefited. Soupault reports that every variety of dyspepsia is clearly improved by it, and in cancer the pains, nausea and vomiting decrease or entirely disappear; the patient eats much more and with less disgust, the hematemeses cease and the general condition improves. In gastric tumor, however, no benefit was obtained. In chronic gastritis,

no matter what the cause or anatomical form, the results were also appreciably good. The action of sodium chlorate is particularly excellent in hypersthenic dyspepsia, or hyperchlorhydria and in the conditions resulting (gastrosuccorhea and gastric ulcer), exercising a lasting result. In the paroxysmic attack so frequent in sufferers from hyperchlorhydria and ulcers, the effects are particularly brilliant. In asthenic dyspepsia, however, the effect is doubtful or altogether insufficient. In the doses named, no ill effects were ever observed, even though the remedy was given for several months.—*Merck's Arch.*

UTERINE CANCER.—

R Acidi salicylici, ctgrm. 0.40.
Sodii salicylat., grm. 12.
Tinct. eucalypti, grm. 24.
Aq. destil., grm. 180.

M. Sig. Three tablespoonfuls to a pint of water as an injection every three or four hours.—*Med. Rec.*

TO ANESTHETIZE THE MEMBRANA TYMPANI.—

R Ac. carbolic pur.,
Menthol,
Cocain hydrochlorat., aa gr.
xv.

M. Sig. External use.

Bonain, of Brest, makes use of this mixture, which is a clear, syrupy liquid, in the following manner: A small bit of absorbent cotton on a stylet is dipped in it and laid against the membrane, which is viewed through a speculum. A slight burning sensation is produced, but in two or three minutes the local anesthesia is complete, and an incision can be made painlessly. The mixture acts to some degree also as a caustic, as is evinced by a slight reddening of the membrane.—*Med. News.*

ECZEMA OF THE SCALP IN INFANTS.

R Acidi salicylici, gr. 15.4.
Zinci oxidi, gr. 77.1.
Lanolini, 37-7.

M. ft. ungt. Sig. For external use.

R Ungt. diachyli Hebræ, 36.4.
Lanolini, gr. 77.1.
Hydrargri oxidi flavi, gr. 3.8.

M. ft. ungt. Sig. External use.—*Louisville Med. Mon.*

INTESTINAL CATARRH.—The following formulæ will be found serviceable in the treatment of this affection. To control inflammatory action:

℞ Salol, 3 ss.

Creasoti, *m* x.

Bismuthi salicylat., 3 j.

M. et ft. capsulæ No. xx. Sig. One every three hours.

If pain be troublesome, opium or phenacetin may be combined with the above formula, or the following may be employed:

℞ Argenti nitrat., gr. ij.

Ext. opii, gr. iss.

M. et ft. pil. No. xii. Sig. One every three or four hours.

In many instances the secretions of the intestinal tube are decreased after the most active symptoms have been subdued. Here we must supplement the natural juices of the bowels, as follows:

℞ Pancreatin, 3 j.

Sodii bicarb., 3 ij.

M. et ft. chart. No. xii. Sig. One an hour after meals.—*Anders, Pract. Med.*

ENLARGED CERVICAL GLANDS.—When a patient comes to you with enlarged lymph nodes of the neck, be sure to examine the throat most carefully. If the patient is a child remember that a very common cause of lymph node inflammation is the presence of hypertrophied tonsils or of adenoid vegetations. In an individual of middle age, examine any hypertrophy critically, bearing in mind the possibility of neoplasm.—*Louisville Med. Mon.*

SCIATICA.—

℞ Powd. opium,

Powd. ipecacuanha, aa gr. xv.

Sodium salicylate, 3 iss.

Ext. of cascara sagrada, gr. x.

M. Make into twenty pills. Dose, from one to three pills daily.—*Ex.*

SNUFF FOR ACUTE CORYZA, RHINITIS, ETC.—

℞ Acidi borici pulv., 3 j.

Acidi salicylici, gr. vj.

Antikamnia (genuine), 3 j.

Bismuth sub. nit., 3 ij.

M. Sig. Use as a snuff every one, two or three hours as required. *Louisville Med. Mon.*

SILVER NITRATE IN RINGWORM.—

Ringworm of the scalp has been treated with excellent results by Lyle with a solution of silver nitrate. Having become tired of the various salves, ointments, oils, etc., which he had been accustomed to use with indifferent success in this intractable disease, he finally chose two of the most chronic cases he could find and undertook an experiment upon them. He shaved and washed the heads, scraped each patch with a Volckmann's spoon and then, by means of a piece of cotton wool rolled round the end of a glass rod and tied there, he applied a solution of silver nitrate in alcohol, containing 1 dram of the salt to an ounce of the solvent. He made such an application twice a week, each time removing the black surface, thoroughly rescraping with the spoon and then rubbing in the solution. The smarting was slight and only lasted a short time. An oil of oleate of mercury containing 5 per cent. was rubbed into the whole scalp night and morning. Although nearly the entire scalp was invaded with scabs, in these two cases, after fourteen weeks' treatment, one was quite well and the other nearly so. In a number of milder cases he found the improvement prompt and remarkable. He states that in cases of alopecia areata if mistaken for tinea the treatment is not likely to be of much use.—*Merck's Arch.*

CORYZA.—

℞ Quinine sulphate,

Ammon. chloride, aa gr. ½.

Camphor, gr. 5.

Powd. opium,

Ext. belladonna, aa gr. ¼.

Ext. aconite, gr. 10.

Make ten pills. Dose, two pills at first; follow with one every hour until cold is broken up.—*Louisville Med. Mon.*

OREXINE IN THE VOMITING OF PREGNANCY.—Dr. Frommel (*Therapist*) has found orexine a very effective and prompt remedy in the vomiting of pregnancy. He used it in four cases. In two cases the vomiting ceased entirely in two days, and in the other two it diminished and ceased altogether in two weeks.—*Louisville Med. Mon.*

SCIATICA.—The following combined plan has cured every case treated for seven years:

R Crude carbolic acid (No. 5),
3 ij.

Aq., ad $\frac{3}{4}$ ij.

M. Sig. To be well shaken and rubbed in for five minutes with the edge of a rolled-up bandage, care being taken that none gets on the fingers.

R Potass. iodid., 3 j.
Sodii salicylat.,
Spir. chloroformi, aa 3 ij.
Aq., $\frac{3}{4}$ viij.

M. Sig. Tablespoonful every four hours in water.—*Gibbes, Med. Rec.*

INJECTION FOR GOMORRHEA IN WOMEN.—Lutaud (cited in the *Jour. de Med. de Paris*) employs the following formula:

R Alum,
Borax, aa gr. 450.
Quinine sulphate, gr. 15.
Carbolic acid,
Ess. of thyme, aa gtt. 30.
Glycerin, gr. 3,000.

M. A tablespoonful in a pint of warm water to be used as a vaginal injection two or three times a day.—*Louisville Med. Mon.*

RELATIONS BETWEEN PURE AND APPLIED SCIENCE.—The president of the Geological Society of America, in his presidential address (*Science*) made the following trenchant remarks:

"We give all honor to applied science, yet we cannot forget that it is but a follower of pure science. The worker in pure science discovers; his fellow in applied science utilizes; the former receives little credit outside of a narrow circle; pecuniary reward is not his object and rarely falls to his lot; the latter has a double possibility as an incentive, large pecuniary reward and popular reputation in case of noteworthy success. The two conditions are well represented by Henry, the investigator, and Morse, the inventor and promoter.

Men are ignorant of their debt to closet workers because the facts have never been presented. As geologists and as citizens of no mean countries, we ought to present this matter clearly to men whose fortunes have

come through application of principles discovered by obscure workers. Such men are quick to perceive the justice of the claim and usually are ready to pay a reasonable interest on the debt.

The world must advance or retrograde; it cannot stand still. Continued advance in physical comfort and intellectual power can come only through intenser application to investigation along the lines of pure science, which can be made possible only by affording increased opportunities for research in our colleges and by the expansion of research funds held by societies such as this." *N. Y. Med. Jour.*

DIFFICULT DENTITION.—

R P. antimon., gr. j.
Hydrarg. chlor. mit., gr. xij.
P. ipecac et opii, gr. ij.
Sacchar. lac., gr. 12.

M. Dixide into twelve powders. A powder may be given to a child from six months to two years old, in syrup every four or five hours.—*Med. Rec.*

PASTILLES FOR FETID BREATH.—The *Jour. de med. de Paris* gives the following:

R Powd. coffee, gr. 675.
Vegetable charcoal,
Powd. sugar,
Vanilla, aa gr. 225.
Mucilage of Senegal gum, q. s.

M. Make into pastilles, each containing fifteen grains. Five or six may be taken daily.—*N. Y. Med. Jour.*

IMPOTENCE.—

R Ext. cannabis indica, gr. iv.
Ergotine, \mathfrak{D} ij.
Ext. nuc. vom., gr. vij.
Ext. damiana, \mathfrak{D} ij.
Aloin, gr. ij.

M. ft. caps. No. xx. Sig. One capsule three times a day.—*Med. and Surg. Mon.*

BLENORRHAGIC DYSURIA.—

R Sodii salicylat., grm. 10.
Ext. belladonnæ, ctgrm. 0.30.
Tinct. aurantii cort. amar.,
grm. 5.
Aq., grm. 195.

M. Sig. Teaspoonful every two to three hours.—*Gerbert, Med. Rec.*

HYPODERMATIC MEDICATION.—

℞ Creosote, 25.

Ol. oliv. sterilis,

or Ol. amygd. dulc.,

or Vaseline liq., 100.

Or:

℞ Guaiacol, 10.

Ol. oliv. steril., 100.

Subcutaneously in pulmonary tuberculosis.—*Eloy.*

Caution.—Not to be used in congestion, hæmoptysis, renal lesions and pyrexia.

℞ Camphor, 2.

Liq. paraffin, 8.

M. Sig. A syringe (one c.c.) contains twenty centigrams camphor.—*Bosner, Med. Rec.*

THE TREATMENT OF RINGWORM OF THE SCALP BY CHLORIDE OF SODIUM. Geo. D. Perkins (*Lancet*) says that for the past fifteen years he has treated every case of ringworm which has come under his care with chloride of sodium, and with complete success in every case. The first case in which he adopted this treatment was a chronic one of five years' standing. The child was well in three weeks and had no return. Many of the cases have been chronic. The method Perkins adopts is the following: Have some chloride of sodium finely powdered and mixed with a little vaselin to make an ointment. The affected part having been shaved rub the ointment in well night and morning until the place is sore; this takes from two to four days. Then apply some simple application to aid healing. When well from the soreness the hairs will be found growing healthily and the tinea trichophyton destroyed.—*Medical Age.*

MELÆNA NEONATORUM.—

℞ Liq. ferri sesquichlor., gtt. 10.

Aq. destil., 70.

Syr. cinamomi, 20.

M. Sig. Teaspoonful every hour. *Widerhofer, Med. Rec.*

CATHARTIC PILL.—

℞ Ext. aloes,

Ext. rhei,

Pulv. rad. rhei, aa 2.

Ext. colocynth, 0.3.

M. ft. pil. No. 60. Sig. Three to four pills before retiring.—*Nothnagel, Med. Rec.*

MASSAGE IN VOMITING OF PREGNANCY.—Jeffroi (*Bulletin Général de Thérapeutique*) states that in many cases of this sort, where numerous remedies have been employed without relieving the condition, a few applications of massage to the stomach and duodenum gave good results.—*Therapeutic Gazette.*

RYERSON'S CLEANSING SOLUTION FOR THE NASAL PASSAGES.—Dr. G. Sterling Ryerson, of Toronto, (*Canadian Practitioner and Review*) devised the following solution in 1884, and has used it ever since with satisfactory results:

℞ Sodium bicarbonate,

Sodium baborate,

Sodium chloride, aa gr. 30.

Sodium salicylate, gr. 40.

Oil of bergamot, m 3.

Listerine, ʒ ½.

Glycerin, ʒ i.

Distilled water, q. s. ad ʒ 8.

M.—*N. Y. Med. Jour.*

OVARIAN NEURALGIA.—The *Gazzetta degli ospedali e delle cliniche* gives the following prescription on the authority of Martin:

℞ Ext. belladonna, gr. 3¾.

Ext. stramonium, gr. 4½.

Lactophenin, gr. 90.

M. Divide into twenty pills, of which two or three may be taken daily.—*N. Y. Med. Jour.*

BROMOFORM IN PHTHISICAL COUGH.

℞ Bromoform, gtt. 30.

Alcohol, grm. 10.

Syr. ipecac comp.,

Syr. opium, aa grm. 100.

Syr. cherry-laurel, grm. 190.

Mix in the order indicated to obtain a clear mixture. Sig. Three or four tablespoonfuls daily between meals.—*Louisville Med. Mon.*

ANAL FISSURE.—

℞ Europhen, o. 10.

Butyr. cacao, 3.

M. ft. supposit. Sig. Introduce into rectum after using a cleansing enema.—*La Presse Méd.*

BLEPHAROSPASM.—

℞ Tinct. hyoscyami, fl. 3 j.

Sig: Ten drops three times a day, increased to physiological limit.—*Dominion Medical Monthly.*

HEBRA'S CORN REMEDY.—

- R Acid salicylici, gr. 15.
 Ext. cannabidis indicæ, gr. 8.
 Alcoholis, *m* 15.
 Ætheris, *m* 40.
 Collodii flex., *m* 75.

M. Sig. Paint on thrice daily for one week; then soak the foot in hot water and pick out the corn.—*Med. Rec.*

TREATMENT OF GONORRHOEAL OPHTHALMIA.—Dr. D. T. Vail, of Cincinnati, closes a good paper with this summary:

1. The general practitioner should always warn his gonorrhoea and leucorrhoea patients of the danger of inoculating their eyes.

2. As the family physician is usually the first consulted, he has the golden opportunity which the first hours afford. He should seal the unaffected eye at once.

3. It is well to bear in mind that all cases of purulent ophthalmia are not gonorrhoeal; on the contrary, only a very small percentage are.

4. For diagnostic and scientific reasons microscopical examination of the discharge should be made.

5. For the cornea to escape involvement is the great exception.

6. The best early treatment in judgment is: (a) Leeching; (b) continuous iced applications day and night; (c) nitrate of silver, two to four per cent. solution, applied to the everted eyelids once or twice a day; (d) non-irritating gentle flushing of the eye every few minutes; (e) canthotomy downwards and outwards to liberate the lower lid.—*Periscope of Med. Progress.*

ASTHMA.—

- R Potassii iodidi, 3 iij.
 Ext. belladonnæ fl., 3 j.
 Ext. lobeliæ fl., 3 ij.
 Ext. grindeliæ fl., 3 iv.
 Glycerini,
 Aq. destillatæ, aa ʒ iss.

M. Sig. Take a teaspoonful every two, three or four hours, as necessary. *Bartholow, Kansas City Med. Rec.*

PRURITUS.—

- R Plumbi acet. neutr., o.i.
 Cocain. muriat., o.15.
 Vaselini alb., 3.

Allgemeine mediz. Central-Zeitung.

POST-HEMORRHAGIC ANEMIA.—

Bompiani, of Rome, has obtained remarkable results with inhalations of amyl nitrite in cases of acute anemia consecutive to extensive hemorrhage and recommends it as superior to the subcutaneous injection of ether in reviving persons in danger of death from hemorrhage.—*Med. Brief.*

RHEUMATISM.—

- R Powdered guaiacol, ʒ j.
 Powdered rhubarb, 3 ij.
 Potassium bitartrate,
 Sublimed sulphur, aa 3 j.
 Powdered nutmeg, 3 iv.
 Honey, lb. j.

M. Sig. Two large tablespoonfuls to be taken night and morning.—*Med. Rec.*

HYDROCHLORATE OF QUININE IN MALARIA.—In cases of malarial fever Dr. Eshner uses, by preference, the hydrochlorate as containing the greatest proportion of active quinine. To insure solubility and facilitate absorption the drug is given in solution as follows:

- R Quinine hydrochlorate, 3 ij.
 Dilute hydrochloric acid, 3 iv.
 Dilute hydrobromic acid, ʒ j.
 Syr. of lemon, 3 iv.
 Aq., ʒ j.

M. Dose, one teaspoonful thrice daily.—*Phila. Poly.*

TUBERCULOUS MENINGITIS.—

- R Moschi, gr. iij.
 Camphoræ, gr. xv.
 Chloral hydrat., gr. viiss.
 Vitelli ovi, No. j.
 Aq. dest., ʒ iv.

M. Sig. Wash out the rectum with simple enema and inject two ounces.—*Simon, Med. Rec.*

ANTIGALACTIC.—

- R Atropinæ sulph., o.003.
 Magnes. sulph., 90.
 Infus. gentian, 240.

M. Sig. Tablespoonful every two hours.—*Bloom, Med. Rec.*

BRONCHITIS WITH BRONCHORRHOEA.

- R Ext. belladonnæ, ctgrm. o.01.
 Ext. daturæ, ctgrm. o.05.
 Pulv. camphoræ, q. s.

For one pill. One to three daily.—*Med. Rec.*

SYPHILIS.—

- ℞ Hydrarg. prot., -
Lactucarii, aa gr. xv.
Ext. opii, gr. 2¼.
Ext. gualaci, 3 ss.

M. et ft. pil. No. xx. Sig. One pill at breakfast and after supper, followed by a large draught of water. *Diday.*

- ℞ Acid. nitro muriat. dil., fl. 3 iiss.
Syr. stillingiae comp., fl. 3 xliiss.
Aq., fl. 3 ij.

M. Sig. One or two teaspoonfuls three times a day. (In cases saturated with approved remedies, but still presenting mucous patches.)—*Bartholow, Louisville Med. Mon.*

PERNICIOUS VOMITING.—According to Prof. Pozzi, pernicious vomiting may be relieved by the hypodermic administration, in epigastric region, of one-sixth of a grain of cocaine hydrochlorate. This was successful in five cases after administration by mouth had failed.—*Louisville Med. Mon.*

DYSENTERY.—

- ℞ Argenti nitratis, gr. xxx.
Aq., O iss.

M. Sig. For one injection.

- ℞ Pulv. ipecac., 3 iss.

Ft. in pulv. No. vi. Sig. One morning and evening on empty stomach. (Ch. dysentery.)

- ℞ Atropinae sulphat., gr. ss.
Aq. dest., 3 ss.

M. Sig. Two to three drops every half hour in water, until pupil enlarges and throat feels dry, for the tenesmus.

- ℞ Ferri subsulph., gr. 40.
Pulv. opii, gr. 20.

M. et ft. pil. No. xx. Sig. One t. i. d. (Ch. dysentery.)—*Louisville Med. Mon.*

DISINFECTANT FOR WOUND.—The best disinfectant for a wound from which tetanus may be feared is peroxide of hydrogen, or better still, hydrozone, which kills the bacillus.—*Louisville Med. Mon.*

HEADACHE.—Bromide of ammonium is a most excellent remedy for occasional headaches where there is nervousness.—*The Southern Clinic.*

PHYSIOLOGY OF THE PUERPERIUM.—

Brutzer has carefully studied the material of the Breslau Maternity Hospital to decide the question whether prolonged rest in bed exerts a favorable or unfavorable influence upon the health and well-being of the woman. He examined the 974 cases as to pulse, temperature, general condition and involution of the genitals, and concluded that prolonged rest in bed is not desirable. Herecommends that the puerpera should leave bed about the fifth day, contra-indications, of course, being absent. *Am. Jour. of Obstet.*

THREADWORMS.—

- ℞ Santonin, gr. ¼.
Calomel, gr. 1½.

This is to be taken every morning before breakfast, for three days.

- ℞ Mercurial ointment, part j.
Glycerite of starch, parts ij.

M. Sig. To be inserted into the anus.—*Comby, Med. Rec.*

PEPTONIZED ENEMATA.—Peptonized milk gruel or peptonized beef tea may be prepared in the usual way up to the point of the addition of the liquor pancreaticus. This may be added when the liquid has cooled down sufficiently in the dose of one dessertspoonful, and the fluid then at once injected into the bowel, there to become peptonized.—*Roberts, Louisville Med. Mon.*

INFANTILE CONSTIPATION.—Dr. William M. Beach, of Pittsburgh, says in the *Pennsylvania Medical Journal*: "A formula that I frequently use for infants is:

- ℞ Hydrargyri chloridi, corrosivi,
gr. 1/16.
Olei ricini, 3 ss.
Mucilaginis acaciae, q. s.
Misturæ cretæ, q. s. ad 3 ij.

M. Sig. One-half to one teaspoonful from one to three times daily.—*Med. Bull.*

PURGATIVE PILLS.—

- ℞ Podophyllin,
Leptandrin,
Ext. colocynth. comp., aa 3 j.
Ol. menth. pip., gtt. vj.

M. Ft. pil. No. 60. Sig. One for a laxative, two for a purgative, and three for a drastic effect.—*Prac. Med.*

HÆMOPTYSIS IN CHILDREN.—

℞ Ferri sesquichlor., 0.4-1.

Syr. cinnamomi, 30.

Aq. destill., 100.

M. Sig. Tablespoonful every half hour.

Or:

℞ Syr. ipecacuanhæ, 30.

Pulv. ipecacuanhæ, 0.3.

M. Sig. Teaspoonful every five minutes until emesis ensues.

Or:

℞ Ergotin, 1.

Syr. rhatan, 10.

Aq. destill., 100.

M. Sig. One tablespoonful every hour.—*Gassicourt, Med. Rec.*

ORTHOFORM EMULSION.—Kassel has lately used an emulsion of orthoform, 25 parts, and olive oil, 100 parts, for laryngeal application. The burning sensation in this case only lasts about a quarter of an hour and is then succeeded by anæsthesia, which commonly lasts from twenty-four hours to three and one-half days. The feeling of comfort experienced by the patient is remarkable; he is able to eat all kinds of food, and the appetite is greatly increased. The emulsion has not the disagreeable taste in the mouth that is often experienced after cocaine insufflations. Another advantage over cocaine is that it seldom causes dyspepsia. The anæsthesia lasts much longer than after cocaine. Kassel has employed the emulsion chiefly in cases of tuberculosis. He noticed a distinct diminution in the amount of secretion in cases of ulceration, but otherwise it did not appear to have any local therapeutical value. Patients do not dread the lactic-acid treatment if orthoform emulsion is used regularly.—*British Medical Journal.*

ENEMA FOR TUBERCULOUS PERITONITIS.—

℞ Creosoti, 0.5-2.

Tinct. opii, gtt. 6.

Ol. jecoris aselli, 100-150.

Holz, Med. Rec.

FEVER BLISTERS.—

℞ Camphor, gr. v.

Arrowroot, powd.,

Bismuth, subnitrate, aa gr. xxx.

Cold cream, 3 iv.

Louisville Med. Mon.

PEPTONIZED MILK.—(Prepared cold.)

A pint of milk is diluted with half a pint of lime water containing 20 grains of bicarbonate of soda in solution. To this are added three teaspoonfuls of liquor pancreaticus. The mixture is then set aside at the ordinary temperature of the dwelling room, 60° F., for a period of three or four hours, and is now ready for use (Roberts). If kept longer the process would continue and the milk become too bitter, unless the ferment be destroyed by boiling the liquid at this stage.—*Louisville Med. Mon.*

NYMPHOMANIA.—

℞ Pulv. camphoræ,

Ext. lactucarii, aa 3 ss.

M. et ft. pil. No. xv. Sig. From four to six pills daily.—*Ricord.*

℞ Potassii bromidi, ʒ vj.

Aq. dest., ʒ v.

M. Sig. Dose, three ounces before dinner and four at bedtime.—*Brown-Sequard, Louisville Med. Mon.*

URTICARIA.—

℞ Menthol, gr. 40.

Chloroform,

Ether,

Spir. camphoræ, aa 3 ʒ.

M. Sig. For external use as a spray or lotion. The affected part should then be dusted with powdered starch or oxide of zinc.—*Louisville Med. Mon.*

RHEUMATIC GOUT.—

℞ Sodium salicylate, ʒ ss.

Sodium nitrate,

Potassium iodide, aa 3 iiss.

Colchicum oxymel, fl. 3 iss.

Syr. of burdock-root, fl. 3 v.

One tablespoonful in a half glass of water twice a day for forty days. *Bacelli, Med. News.*

SUPRA-RENAL GLAND IN THE TREATMENT OF CHLOROFORM ACCIDENTS.—In the *Revue de Therapeutique Medico-Chirurgicale* we are told that Minikowsky has repeated the experiments of Biede and of Gottlieb, and has found that the use of supra-renal gland in the lower animals does much toward preventing accidents during the administration of chloroform, probably through its powerful influence on the vascular system.—*Therap. Gazette.*

GOUT.—The following formula is stated by the *Klinische Therapeutische Wochenschrift* to be useful in the treatment of gout:

- ℞ Sulphate of quinine, 3 j.
Citric acid, 3 ij.
Simple syrup,
Syrup of orange flowers, aa 3 ij.
Distilled water, 3 vj.

Ten drops of this mixture in an ounce of water, to which is added 20 grains of bicarbonate of sodium, will, it is stated, make a pleasant effervescent quinine draught.—*La Medicine Moderne*.

CARBOLIC ACID TABLETS.—G. Meyer calls attention to a carbolic acid tablet made according to a formula of Lutze which is practicable and permanent. Each tablet contains 15 grains of carbolic acid; to this 20 per cent. of anhydrous boric acid is added. This salt has the property of taking up large amounts of moisture without becoming liquefied. These tablets may then be placed in warm or cold water and the carbolic acid can be seen to dissolve out of the tablet in small drops. By shaking the solution gently a uniform mixture can be obtained. Solutions of any desired strength can thus be made, and the disagreeable necessity of the use of a measuring glass is avoided. In addition to this the accuracy in making the solutions is to be borne in mind. The odor and taste are characteristic enough to prevent their being mistaken for any other kind of tablet.—*Merck's Archives*.

CRAYONS OF CHLORAL AND MENTHOL.—The *Journal de médecine de Paris* gives the following formula:

- ℞ Chloral hydrate,
Menthol, aa part j.
Cacao butter, parts ij.
Spermaceti, parts iv.

Melt the cacao butter and the spermaceti together, add the chloral and menthol, and pour the whole into a mould.—*Louisville Med. Mon.*

SYCOSIS OF THE BEARD.—

- ℞ Sulphur, 3 ij.
Ol. rose, m v.
Vaseline, 3 j.

M. Sig. Use locally after removing loose hairs.—*The Med. Sum.*

CROTON CHLORAL AS A TENIAFUGE.

- ℞ Croton chloral, gr. 70.
Pulv. tragacanth, gr. 1½.
Pulv. acaciæ, gr. 4.
Syr. simpl., gtt. 25.

M. Et. ft. pil. No. xxiv. Sig. Four pills to be given in the evening before bed-time and four the next morning on an empty stomach. An hour after breakfast give a milk purgative.—*Renshaw, Louisville Med. Mon.*

AMENORRHEA.—

- ℞ Strych. sulphat., gr. ij.
Acid oxalic, gr. x.
Mangani lactat.,
Ferri peptonat., aa 3 ij.
Ext. colocynth co., 3 ss.

M. Div. in pulv. No. xl. Sig. One powder twice daily after meals.—*Louisville Med. Mon.*

A TAMPON FOR CANCER OF THE UTERUS.—

- ℞ Orthoform, gr. 15.
Arsenious acid, gr. 1½.
Alcohol,
Water, aa m 120.

M. A tampon of absorbent cotton is saturated with this solution and applied *per vaginam*.—*N. Y. Med. Jour.*

MUMPS.—*Le Progrès Médical* attributes to Bouchard this formula:

- ℞ Acid. carbol., gr. viij.
Quinin. sulph.,
Acid salicylic, aa 3 ss.
Spir. sacchari, 3 iv.

M. Sig. Tablespoonful every hour. *Med. Bull.*

INFANTILE COLIC.—Five drops of tincture lobelia in two ounces of water, half teaspoonful every few minutes, given warm, will cure many cases of infantile colic from whatever cause, will soothe nervous irritation, and induce sleep.—*Chicago Medical Observer*.

EUROPHENE IN THE TREATMENT OF BURNS.—The *Presse Medicale* gives the following formula:

- ℞ Europhene, part j.
Vaseline,
Lanolin, aa parts x.

M. For burns to the degree of rubefaction or vesication.—*Louisville Med. Mon.*

FORMULÆ FOR THE INJECTION OF GELATIN.—M. Lancereaux and M. Paulesco (*Jour. des praticiens*) employ the following formula:

℞ Gelatin,
Sodium chloride, gr. 150.
Aq., $\frac{3}{4}$ 33⅓.

Sterilize. Begin by injecting fifty cubic centimetres, then increase up to 150 cubic centimetres. The authors make the injection in the thigh.

M. Huchard and M. Deguy (*Jour. des praticiens*) have employed the following formula against tuberculous hæmoptysis:

℞ Gelatin, gr. 105.
Sodium chloride, gr. 150.
Aq., $\frac{3}{4}$ 33⅓.

Dissolve by heat, filter and sterilize. Begin with injections of fifty cubic centimetres in the skin of the abdomen.

The same authors employ more concentrated solutions for aneurysm—for instance:

℞ Gelatin, gr. 30.
Sodium chloride, gr. 150.
Aq., $\frac{3}{4}$ 33⅓.

Begin with twenty-five cubic centimetres and increase to fifty cubic centimetres.—*N. Y. Med. Jour.*

FOWLER'S SOLUTION FOR BOILS.—Wallick, of Williamsfield, Ill., says the best possible remedy for boils is Fowler's solution given in five or ten drop doses after each meal. It checks the development of a new crop when the first has completely suppurated. The author says he uses it as his sheet-anchor in acute and chronic forms and it has not failed of success in one out of twenty trials.—*Merck's Arch.*

GALACTORRŒA.—

℞ Potassi iodidi,
Iodi puri., aa 1.
Syr., 30.
Aq., 200.

M. Sig. Tablespoonful every hour.—*Audhovi, Med. Rec.*

NEURALGIA OF FACE.—

℞ Chloral hydrate,
Menthol,
Thymol, aa 3 j.
Camphor, 3 iij.

Mix and apply locally.—*Amer. Med. Compend.*

SULPHATE OF SODIUM IN CATARRH OF THE STOMACH.—Simon, of Vienna, uses small doses of sulphate of soda for the treatment of this condition. He usually gives from ten to fifteen grains of it in about six ounces of hot water, and under these circumstances the catarrhal condition of the stomach, with its hyperacidity, passes away, and the sensations of pain and discomfort in the epigastrium with nausea are relieved. This method of treatment is supposed to do good by improving the motor power of the stomach.—*La Medicine Moderne.*

PERTUSSIS.—

℞ Hydrochlorate of phenocoll,
gr. xvij— $\frac{3}{4}$ iss.

M. div. in chart. No. xii. Sig. One powder three times a day.—*Kobert.*

Or:

℞ Tinct. bellad., 10.
Tinct. valerian,
Tinct. digitalis, aa 5.

M. Sig. Five to sixty drops according to age.—*Roger.*

Or:

℞ Pulv. fol. belladon., 0.05.
Sacchari, 0.25.

M. ft. pulv. Sig. Two to eight powders daily.—*Sandras, Med. Rec.*

MALARIAL CACHEXIA.—Dr. Lockwood recommends the following for the anæmia following the malarial attacks:

℞ Ferri redacti, gr. 2.
Pulv. ipecac, gr. $\frac{1}{4}$.
Acid arseniosi, gr. $\frac{1}{16}$.
Ext. colocynth co., gr. 2.

M. Ft. pil. Sig. Take one three times daily.—*Louisville Med. Mon.*

CHAPPED HANDS.—

℞ Menthol, 1.
Salol, 2.
Olive ol., 3.
Lanolin, 80.

M. Sig. Apply twice daily.—*Ritterband, Med. Rec.*

CREOSOTE ENEMA.—Martz (*Prov. med.*) gives the following formula:

℞ Creosote, parts 10.
Ol. of sweet almonds, parts 200.

M. Sig. A tablespoonful, as an enema, morning and evening.—*N. Y. Med. Jour.*

ANTEMETIC MIXTURES.—The *Gazzetta degli ospedali e delle cliniche* attributes the following to Weglesworth:

- ℞ Menthol, gr. 15.
Alcohol,
Syrup, aa gr. 600.
Chloroform aq., gr. 1,050.

M. A dessertspoonful every half hour.

For the vomiting of pregnancy and bilious vomiting the following are given:

- ℞ Carbolic acid, gr. $\frac{1}{8}$ to $4\frac{1}{2}$.
Chloroform, gtt. 5.
Syrup,
Distilled aq., aa gr. 1,800.
Tinct. of bitter orange peel,
q. s.

M. A dessertspoonful every two hours. Some spoonfuls of water should then be administered from time to time.—*N. Y. Med. Jour.*

HYDROCHLORIC ACID IN GASTRIC ANACIDITY.—Gastric anacidity is said by Reed to be best treated by hydrochloric acid. He says: "Wegele and Hemmeter, among recent authors, bear witness to the powers of HCl as a stomachic or stimulant to the peptic glands. Hemmeter also quotes Riegel, Reichmann and Mintz as having reported cases of gastric anacidity in which the restoration of HCl was effected by a more or less prolonged dosage with the same acid. Hemmeter gives twenty drops of the diluted HCl in appropriate cases in two ounces of water every half hour beginning fifteen minutes before meals and continuing it till half an hour after the meal. He has frequently seen excellent results from this method, and believes that the motor function of the stomach is favorably influenced as well as the glands, a view which my own experience confirms. My practice has been to give much smaller doses. I direct the patient usually to begin with a dose of four or five drops of the dilute HCl given after each meal in this way: The amount prescribed which is gradually increased if necessary up to ten, or, exceptionally, even to twenty drops, is added to half a goblet of water, which the patient is directed to take in small sips at frequent intervals during an hour or an hour and a half. In cases of com-

plete or nearly complete anacidity the sipping of the diluted acid is begun immediately after the meal, but in other cases, not till the meal has been over for half an hour. In this way the amylaceous portions of the food are given time for the action of the saliva. I was led to adopt this gradual method of administering the acid through having observed a number of cases with absence of free HCl in which the patients complained of a marked burning in their stomachs after taking quite small doses of the remedy. This apparent intolerance of the drug was overcome entirely by having it taken gradually in small sips and the results eventually were quite as gratifying as in other cases in which no such disagreement had occurred."—*Merck's Arch.*

APHTHOUS STOMATITIS.—

- ℞ Salicylic acid, 3 ss.
Glycerin, 3 ss.
Alcohol, q. s.

M. Sig. For local application. In the ulcerative period:

- ℞ Sodium salicylate, gr. xv.
Cocaine hydrochlorate, 3 ss.
Distilled aq., 3 xxxviiij.

M. Sig. For local use.

Internally, the following cachets four times a day:

- ℞ Bismuth salicylate, gr. iv.
Sugar of milk, gr. ss.

Or:

- ℞ Salophen, gr. ivss.

Or:

- ℞ Benzonaphthol, gr. 4.
Sugar of milk, gr. 1-3.

Le Progrès Médical.

RECURRENT EPISTAXIS.—According to the *Riforma medica*, Rendu recommends:

- ℞ Antipyrine, gr. $7\frac{1}{2}$.
Tannin, gr. 15.
Powd. sugar, gr. 150.

To be used locally.—*N. Y. Med. Jour.*

FAVUS.—

- ℞ Chrysarobin,
Ichthol, aa grm. 5.
Acid. salicylic, grm. 2.
Adipis, grm. 30.
Vaseline, grm. 60.

M. Sig. Apply.—*Unna, Dent. Med.-Zeit.*

SENILE BRONCHITIS.—The late Dr. P. R. Agnew strongly recommended the following prescription in senile bronchitis:

℞ Pulv. ammon. muriat., ʒ ss.
Infusi gentian, ʒ j.

M. Sig. Wineglassful before meals.

It also served as an excellent bitter tonic.

℞ Chloralis,
Acidi tartarici, aa gr. xviiij.
Ol. ricini, gr. vij.
Spir. vini recti, ʒ iij.
Ess. flor. æth., ʒ ij.

Eichhoff, Deut. Med. Woch.

PEPSIN IN BURNING OF THE THIRD DEGREE.—O. Waterman, of New York, gives a history of a case of a machinist, 46 years of age, who received a burn of the third degree, caused by some boiling pea-soup which was spilled over his left forearm. This was at first treated with carron-oil and next day with iodoform gauze. At the end of three or four days the wound was covered with a dirty-whitish purulent secretion with raised edge. Some places were curetted. Pepsin was then sprinkled over the arm and the whole surrounded by a gauze bandage. At the end of four days this was removed and the wound surface was studded over with healthy granulations, and here and there new patches of epidermis had commenced in this short time to develop. The wound was then again cleaned with antiseptics and another sprinkling of pepsin applied. At the end of about twelve or thirteen days the whole arm was healed and there was no scar tissue. It is also to be noted that the patient was anemic and suffering from tabes dorsalis.—*Merck's Archives*.

ACUTE CYSTITIS.—The following is recommended by Professor Horwitz:

℞ Belladon. succi, gtt. xx.
Sodii boratis, ʒ ij.
Acid. benzoic, gtt. xx.
Tinct. opii camph., ʒ iss.
Ol. gaulther., gtt. xij.
Syr. simp., ʒ ij.
Aq. dest., ʒ iv.

M. Sig. Two drams in water four times a day.—*Dunglison's Col. and Clin. Rec.*

CEPHALIC GROWING-PAINS.—E. Perrier recommends the following method of treating cephalic growing-pains:

Give every half hour from three to eighteen grains of hypnol, every morning a glycerophosphate and before each meal in a small glass of malt extract eight to twelve drops of:

℞ Tinct. nux vomica, gr. xxxj.
Tinct. anise seed,
Tinct. gentian, aa gr. viij.

This should be accompanied with food rich in phosphates. The child should suspend work and go to the country at a mean altitude of 2,000 feet.—*Merck's Arch.*

CORYZA.—

℞ Cocaine hydrochlorate, gr. iiss.
Menthol, gr. iv.
Boracic acid, gr. xxx.
Powd. coffee, gr. viij.

Use as a snuff.—*Whitney, Med. Rec.*

℞ Sozoiodole zinc, parts 7.
Menthol, part 1.
Milk sugar, to make parts 100.

Snuff. If possible, the nasal mucous membrane should be previously cocainized.—*Suchanek, Merck's Arch.*

IMPETIGO VULGARIS.—M. Hodara advises the following application for chronic moist eczema of the head and ears of children and also for impetigo vulgaris:

℞ Benzoinated lard, 3 ʒ.
Olive oil, m 140.
Red precipitate mercury gr. 225.
Finely powd. white sugar, gr. 90.
Carbolic acid, gr. 1-10.

Merck's Arch.

PROPHYLACTIC GARGLE IN SCARLATINA.—

℞ Beta-naphthol, 3 j.
Camphoræ,
Glycerini, aa 3 iv.

M. Sig. For application to the throat.—*North American Pract.*

CHRONIC RHINO-PHARYNGITIS.—

℞ Menthol, part j.
Oil of sweet almonds or liquid vaselin, parts x.

M. Sig. Apply with a brush.—*Louisville Med. Mon.*

COLLUTORIA FOR INFANTILE APHTHA.—The *Gazzetta degli ospedali e delle cliniche* gives the following formula:

1.

- R Sodium borate, parts 4.
Tinct. of myrrh, parts 8.
Syr. of mulberries, parts 60.

M.

2.

- R Borax, parts iv.
Tinct. of benzoin, parts ij.
Distilled aq., parts x.
Syr. of honey, parts xx.

M.

3.

- R Calcium chloride, parts iij.
Honey, parts xx.

M. The patches are to be touched four or five times a day with a camel's hair pencil dipped into either of these mixtures.—*The Med. and Surg. Monitor*.

MERCURIAL INUNCTION.—To obviate the objectionable features of the ordinary blue ointment, Schuster prefers a soft soap, which is made by Neunerdt and Smidt, in Hanover, according to the formula devised by him, which is as follows:

- R Hydrargyri depurati, per cent.
33⅓.
Sapon. oleacei albiss. pulver.,
per cent. 12⅓.
Sebi filtrati, per cent. 18.
Adipis filtrati, per cent. 36.

This soap mixes easily with water, stains the skin but slightly and is easily washed off in the course of a few days.—*International Med. Mag.*

INSOMNIA IN THE INSANE.—Cristiani has given lactophenin for insomnia in over 200 cases of insanity with very good results. The dose given varied from one to three grains, the remedy being administered in some sweet emulsion. Sleep that had all the characters of a natural slumber followed in a very short time, lasted from four to nine hours, and was not succeeded by any bad effects—no stupor or morning headache and no digestive disturbances. Like most other hypnotics, it lost its effect after continued use, but after a short intermission could be used again with good results. The author used it in all kinds of mental cases and in different physical conditions—

for example, cardiovascular, kidney, and other diseases. He considers it quite safe and more generally useful—in insane subjects—than opium, chloral, trional, or any other hypnotic. As it has no taste or smell it is not difficult to administer.—*University Med. Mag.*

AFTER REMOVAL OF GALL-STONES.—

In a paper contributed to the *Western Clinical Recorder*, Dr. Hal C. Wyman, of Detroit, Michigan, says: "A prescription which I have often used with great advantage to my patients from whom I have removed biliary calculi by a surgical operation is:

- R Podophyllin, gr. j.
Leptandrin, gr. v.
Phosphate of soda, ʒ j.

M. et div. in twenty powders. Sig. Take one with a full glass of water once in three hours.

Another is:

- R Tinct. dandelion,
Tinct. wahoo,
Nitromuriatic acid, aa 3 ij.
Simple elixir, q. s. ad ʒ iv.

M. Sig. Take a teaspoonful with a raw egg in a glassful of cold water before each meal. Another to relieve the pain and distress which sometimes follow operations:

- R Jamaica dogwood, fl. ext., 3 ij.
Compound spir. of ether,
Spir. of wine (dilute), aa 3 j.
Syr. of wild cherry, q. s. 3 ij.
Ol. of cinnamon, gtt. j.

M. Sig. Take a teaspoonful in wineglass of hot water once in three hours until pain is relieved.—*The Med. Bull.*

COUGH MIXTURE.—

- R Ammonium chloride, ʒ j.
Fl. ext. licorice, ʒ ij.
Paregoric, ʒ j.
Wine of antimony, 3 iv.
Spir. nitrous ether, 3 ij.
Syr., to make ʒ xvj.

One to four teaspoonfuls every two or three hours.—*Amer. Med. Compend.*

TINEA TONSURANS.—Dr. Cantrell stated that the artificial production of kerion, by means of croton oil, as advised by Atlee Smith, was often a quick and almost reliable method of curing tinea tonsurans.

THE PRESCRIPTION

Therapeutic Cullings.

THE TREATMENT OF TUBERCULAR CYSTITIS.—The *Clinica moderna* gives the following:

In the first stage—viz., before surgical intervention is called for—it is requisite to combat the purulence of the urine and the pains. To that end one of the following formulæ may be used:

℞ Sulphate of codeine, gr. $4\frac{1}{2}$.
Salol, gr. 90.

Divide into twenty powders. Sig. One powder to be taken after each meal.

Or:

℞ Hydrochloride of cocaine,
Extract of cannabis indica, aa
gr. $4\frac{1}{2}$.

Carbonate of guaiacol, gr. 90.

M. Ft. pil. No. xx. Sig. One pill to be taken after every meal.

Against fermentation of the urine urotropin may be given in a dose of four grains and a half four times a day.—*N. Y. Med. Jour.*

ACTION OF ALCOHOL AND ITS USES AS A FOOD ACCESSORY.—We may briefly summarize the present state of our knowledge as to the action of alcohol and its uses as a food accessory: (1) It is to some extent a food, but is seldom taken, except as a stimulant. (2) It can be used up in the body as a source of energy and heat, but the heat produced by it is rendered worse than useless, owing to the greater heat loss brought about by the dilatation of the vessels of the skin. (3) Alcohol is of no use to healthy men who take sufficient food for their daily wants. (4) In moderate doses and well diluted it is not harmful to healthy men under ordinary conditions. (5) Alcohol acts injuriously in all cases of exposure

to great cold or to severe and continuous exertion, such as in Arctic expeditions or mountain climbing.

(6) If taken with meals in moderate doses it is often beneficial, as, after much of the alcohol has been absorbed, the secretion of hydrochloric acid increases often to more than double the proportion to which it otherwise would attain; the secretion of acid also continues longer than when no alcohol has been taken. (7) Alcohol seldom has this stimulating effect if the stomach is diseased.—*Med. Rec.*

BRONCHITIS.—

℞ Syr. tolu,
Syr. pruni virg.,
Tinct. hyoscyami,
Spir. ætheris comp.,
Aq., aa fl. $\frac{3}{4}$ j.

M. Sig. Dose, a teaspoonful.—*Janeway.*

℞ Tinct. veratri viridis, m xv.
Syr. ipecacuanhæ,
Spir. ætheris nitrosi, aa fl. $\frac{3}{4}$ ss.

M. Sig. Fifteen drops every three hours. (For a child one or two years old.)—*Schneck, Ex.*

INFANTILE DIARRHŒA.—

℞ Bismuth salicylate, gr. xxiv.
Gum arabic, 3 j.
White sugar, 3 iss.
Aq., q. s. ad fl. $\frac{3}{4}$ vj.

M. To be kept on ice. Sig. From one to two tablespoonfuls to be given three to six times a day.—*Texas Med. News.*

LACTIC ACID IN GYNECOLOGY.—Dalche has found lactic acid in gynecology a natural antiseptic for the vaginal cavity. In 3 per cent. solution it destroys the bad odor and greenish-yellow color of leucorrhœa and lessens the quantity of the discharge. It causes curative desquam-

ation when applied in half strength in endometritis and endocervicitis. It causes no danger.

The author, after douching with lactic acid solution 1:35, puts in tampons of 1:33 in glycerin every eight days, with daily hot water douches in the interim.—*Merck's Archives*.

AGALACTIA.—

R Strychninæ sulphatis, gr. j.
Pilocarpinæ hydrochlorat., gr. j.
Sacchari lactis, 3 iss.
Alcohol, q. s.

M. et ft. tabellæ triturationes No. 60. Sig. One tablet every four hours. *Indications*: The various malt extracts, with or without cod liver oil, are available adjuvants. Massage of the breasts is also recommended.

R Ext. ergotæ,
Ext. nucis vomicæ, aa gr. vj.
Quinine hydrochlorat., gr. xxiv.

M. et ft. pil. No. xxiv. Sig. One pill every six hours. *Indication*: Use in anemic subjects.

R Ext. pilocarpi, fl., fl. § ij.

Sig. Teaspoonful two or three times a day.—*Bartholow, Dominion Med. Mon.*

ATROPHY OF THE OPTIC NERVE IN LOCOMOTOR ATAXIA.—Silex has determined from personal observation that 15 per cent. of ataxic patients present lesions of the optic nerve. These lesions are often precocious and occur during the pretaxic period. There is then observed a slow progress of the spinal disease. As regards the oft discussed relations between syphilis and tabes, Silex, out of 54 cases of tabetic atrophy of the optic nerve has noted 44 cases of syphilis—i. e., 81.5 per cent. Of eight women seven were syphilitic subjects. From this point of view it is necessary to attach a particular significance to atrophy of the base of the tongue described by Virchow and often considered as a syphilitic complication. Silex has met with this manifestation 16 times in 54 cases. It is never present in non-syphilitic patients.

The manner in which optic atrophy develops is very obscure. It has no direct local relation with the sclerosis of the posterior columns. Some writers admit an ependymitis

with alteration of the vascular centers of the fourth ventricle determining an affection of the optic nerve, exhibited to the microscope by diffuse total degeneration or by islands of fibres of the nerve. Treatment gives variable results. Some patients bear mercurial inunction well and seem to improve under the practice. Nevertheless there is no objective amelioration, and three months later the acuity of vision again declines. In other cases the sight fails rapidly during the mercurial treatment, which has to be abandoned, and we are unable to regain lost ground.

Silex maintains that tabetic atrophy of the optic nerve is never really ameliorated by the mercurial inunctions and that when improvement is produced there has been an error in diagnosis. On the other hand, this method of treatment has pernicious effects in many cases. The same is true of potassium iodide, which acts upon the inflammatory products of interstitial tissue.

Unfortunately, many patients absorb varied doses of iodide, to the great harm of their stomachs. Silex has endeavored to discover whether we can act upon the optic nerve by means of feeble galvanic currents of 2 to 5 milliamperes applied to the cranium and neck. He experimented upon trephined dogs. A current of 2 milliamperes caused weak contractions, which soon became very violent when a current of 5 milliamperes was employed. The current applied to the exposed spinal cord produces convulsions. It seems, therefore, very probable that electricity might cause therapeutic effects in optic atrophy. Silex, however, has never obtained the least advantage from its use. The acuity has continued to decrease until reduced to zero. It was the same with other therapeutic measures. Strychnine, silver, thermal treatment and suspension all failed.—*La Médecine Moderne*.

CHORDEE.—

R Ichthyol, 3 iij.

Lanolin, § ss.

Ungt. petrolei, q. s. ad § j.

M. Sig. For local application.—*Med. and Surg. Mon.*

LARYNGEAL INHALATION.—According to the *Gazette hebdomadaire de médecine et de chirurgie*, Didsbury is responsible for the following:

- ℞ Tinct. benzoin,
Tinct. eucalyptus, aa gr. 60.
Tinct. soapwort, gr. 90.
Aq. cherry-laurel, gr. 150.
Aq. dest., gr. 3,750.

M. Sig. Two inhalations of five minutes each daily.—*N. Y. Med. Jour.*

ACETATE OF THALLIUM IN THE NIGHT-SWEATS OF PHTHISIS.—M. Huchard has made a report upon the use of acetate of thallium in night-sweats, as advised by M. Combemale, in the daily dose of 10 centigrammes (1.5 grains). M. Huchard states that the drug has, indeed, a powerful effect, but sometimes exhibits two serious drawbacks. It is liable to cause fall of the hair and may produce almost total baldness within twenty-four hours. In two patients it also produced severe pains in the lower limbs. M. Huchard, therefore, believes that the drug is not to be recommended.—*La Médecine Moderne.*

DIPHTHERIA.—Dr. M. S. Barsky (*Internat. Med. Mag.*) recommends:

- ℞ Pilocarpinæ hydrochl., gr. $\frac{1}{4}$.
Ammon. carbon., gr. 15.
Potass. hydrochl., 3 $\frac{1}{2}$.
Aq. dest., $\frac{3}{4}$ z.
Spir. vini gallici,
Syr. senegæ, aa $\frac{3}{4}$ i.

M. Sig. Of this mixture, a teaspoonful, a dessertspoonful or a tablespoonful may be given every hour, according to the age of the patient.—*Louisville Med. Mon.*

ELEPHANTIASIS OF THE TONGUE.—Dr. Marchal reports the case of a female child, thirteen months of age, who was brought to him in October of 1896 on account of a very hypertrophied tongue which hung out of the mouth and gave a very repulsive aspect to the face. From the mouth, always open, flowed an abundance of saliva and there was ample opportunity for the entrance of infective germs into the back of the throat and pulmonary passages. The babe took nourishment with difficulty. The surface of the tongue was rough

to the touch, and studded with hypertrophied papillæ. Its lower surface was marked by turgid, flexuous and manifestly varicose veins. The lower jaw was pushed forward and downward. The child had, from the day of its birth, a great difficulty in taking the breast. It was necessary to feed her by the spoon. She was also the subject of a considerable abdominal hernia.

Dr. Marchal performed a conoid amputation of the tongue, diminishing the size of the organ by one-half. Several weeks later it could be entirely contained in the mouth. At the date of the report the child could close the mouth without trouble, speak and eat like any ordinary child of the same age. Her intelligence has taken a rapid development, mastication is normally performed, dentition is almost complete and the physiognomy is entirely changed. Histological examination showed the case to be one of elephantiasis of the tongue.—*Revue Hebdomadaire de Laryngologie, etc.*

LABOR.—

- ℞ Quiniæ sulph., ℥ij.
Acid sulphuric aromat., q. s.
ut ft. sol.,
Syr. zingiberis, aa fl. $\frac{3}{4}$ j.
Aq., ad fl. $\frac{3}{4}$ ij.

M. Sig. A tablespoonful at once, and afterward a dessertspoonful every four hours. (In atony of the uterus.)—*Ringer, Louisville Med. Mon.*

SPERMATORRHOEA.—In spermatorrhœa and anaphrodisia of neurasthenia Bozzolo and Mangianti advise:

- ℞ Citrate of cornutin, gr. $\frac{1}{2}$.
Prep. chalk, gr. 45.
Gum arabic, 3 i $\frac{1}{2}$.

M. ft. pil. No. 20. Sig. From two to four pills to be taken daily.—*La Médecine Mod.*

COCAINE TO RELAX RIGID OS UTERI. Dr. J. Farrar reported some cases to the last session of the British Medical Association to call attention to a rapid method of overcoming a rigid os uteri in labor. It consists in the application of a ten per cent. solution of the hydrochlorate of cocaine on a piece of rag—smearing the os

round and round—first on the outside and then within—finally leaving the rag within the margin of the os. At the end of about four minutes, the os not only loses its rigidity, but is wide open and as flexible and distensible as a rubber bag. The Doctor had had opportunity to test the use of cocaine in only five cases of rigid os in labor before publishing his report; but in each of the five cases the ten per cent. solution of cocaine acted with equal success. This is "a good obstetric wrinkle." *The Va. Med. Semi-Mon.*

GASTRO-INTESTINAL CATARRH. Creosote in small doses in acute gastro-intestinal catarrh is warmly recommended by Dr. Th. Zangger (Zurich), who orders:

℞ Creosote puriss, gtt. 3.
Spir. vini, i. o.
Aq. dest., 100. o.

M. Sig. A teaspoonful three or four times a day in black coffee or peppermint tea before meals—*Louisville Med. Mon.*

ICHTHYOL IN VARIOLA.—Maisels has treated with ichthyol a case of variola in which the results were exceedingly satisfactory. There were no suppuration, no fever, and no scarring of the face, and all irritation was abolished. Furthermore, it seemed certain that the duration of the disease was diminished.—*Merck's Arch.*

ACUTE OTITIS.—The *Gazzetta degli ospedali e delle cliniche* recommends:

℞ Ichthyol, gr. 15.
Glycerin,
Aq. dest., aa gr. 112½.

M. Sig. A few drops of this mixture to be dropped three times daily into the ear.—*N. Y. Med. Jour.*

SALICIN IN PUERPERAL FEVER.—Atherton has given salicin instead of quinine with good results. In one case he gave 45 grains every three hours and the temperature fell to normal by morning, and stood at 99.5° F. at night. In a case of cystic poisoning from necrosed placenta, where, after four weeks of internal treatment and intra-uterine douches, the afternoon temperature never

went below 102° F. Salicin was used in 45 grain doses, and in one week the fever had disappeared. There was no other change in the treatment.—*Merck's Arch.*

BLEEDING GUMS.—After the extraction of teeth Vian recommends the following as an efficient styptic to check the bleeding:

℞ Chloroformi, 3 j.
Acid tannic,
Menthol, aa 3 ss.
Tinct. kramæ, 3 j.
Aq. dest., q. s. ad Oj.

Louisville Med. Mon.

SILVER NITRATE AS AN ABORTIFACIENT.—Abortion in four cases of pregnancy complicated with nephritis and uncontrollable vomiting, was brought about by Perslee in a most successful manner by the introduction of a stick of silver nitrate above the inner os uteri. The stick should project about one-half inch from the holder so as to disinfect the cervical canal as it is introduced. Pains came on in from two to six hours after the cauterization. In every respect the delivery in the four cases was as perfect as could be wished for. The operation has the merit of simplicity, promptness, efficiency and is aseptic. *Merck's Arch.*

MIXTURE FOR THE INSOMNIA OF NEURASTHENIA.—We find this formula in the *Press medicale*:

℞ Chloral formamidate,
Tinct. ginger, aa part 1.
Aq. mint, parts 15.

M. Sig. A tablespoonful to be taken at the time of going to bed. *Louisville Med. Mon.*

HOT AIR AS A HEMOSTATIC.—The jet of hot air from a Holländer apparatus directed upon the bleeding surface of a kidney, liver, or severed blood vessel, will arrest the hemorrhage by the formation of an eschar commencing around the edges and gradually spreading over the entire surface, mechanically checking the flow, in experiments on animals, and Schneider concludes that it would be equally effective on man. The heat is only thirty-nine degrees at five mm. from the apparatus, and hence is not sufficient to injure the

organ. He found steam less effective and less convenient, for several reasons, masking the field of operation, etc.—*La Semaine Med.*

RICKETS—RACHITIS.—

℞ Syr. ferri iodidi, 3 j.

Syr. zingiberis, 3 j.

Aq., q. s. ad 3 iij.

M. Sig. Dose, one dram, t. i. d. for a child of two years.—*Powell.*

℞ Ammonii chloridi, gr. xxiv.

Syr. ipecac, 3 iss.

Syr. tolu, 3 j.

Liq. potass. citrat., q. s. ad 3 iij.

M. Sig. Dose, one dram every two hours for a child of two years.—*Powell.*

℞ Syr. ferri iodidi, 3 iss.

Mist. ol. morrhue et lactophos calcis, q. s. ad 3 ij.

M. Sig. Dose, one-half to one dram, t. i. d.—*Powell, Ex.*

ACUTE NON-DIPHTHERITIC TONSILLAR AFFECTIONS.—Salol is highly recommended by de la Carriere for its action in these cases. The pain and dysphagia are greatly relieved, the duration of the malady is lessened, and abscess formation prevented. Digestion is not disturbed, so that the drug may be taken with meals. Sixty grains a day may be given to an adult, but the use of the drug must be suspended if the urine becomes dark. He prescribes as follows:

℞ Salol, gr. xxx.

Exp'd ol. almonds, fl. 3 j.

Syr.,

Aq. dest., aa fl. 3 iij.

M. Sig. Take in divided doses within twenty-four hours.—*Medical News.*

HERPES PRÆPUTIALIS.—The *Independence medicale* credits Gaucher with this formula:

℞ Powd. alum.,

Powd. starch, aa parts æq.

M. Sig. To be dusted on twice a day.—*Louisville Med. Mon.*

XEROFORM.—Dr. Ehrmann, of Vienna, has used xeroform in his clinic for more than a year, treating 178 patients with it externally and 45 internally. The external cases included superficial diseases, clean, incised and operative wounds, suppur-

ations, and necroses of the skin. In all these cases it had a very beneficial action, but was particularly valuable in balanitis and moist eczema. Given internally, xeroform has no unpleasant taste and causes no eructations. In the dose of seven and one-half grains two to four times a day xeroform has a favorable action in anal eczema, urticaria, and other diseases of the skin accompanied by increased decomposition of the intestinal contents.—*Med. Bull.*

ERYSIPELAS.—

℞ Carbolic acid,

Tinct. iodine,

Rectified spir., aa 3 iij.

Ol. turpentine, 3 x.

Glycerin, 3 iij.

M. The site of the disease is to be painted with this mixture every two hours and then covered with antiseptic gauze.

℞ Ichthyol, 3 x.

Petrolatum, 3 viij.

Lanolin, 3 xv.

M. To be applied locally.—*Louisville Med. Mon.*

MORPHINE BEFORE ANESTHETICS.—About fifteen minutes before beginning a major operation (except in those necessitating an opening of the belly, in which cases the drug is highly objectionable) it is well to give a quarter grain of morphine sulphate and one hundredth grain atropine sulphate, hypodermically. Fully one-half the chloroform will be saved, with corresponding diminution of danger.—*Louisville Medical Monthly.*

EXOPHTHALMIC GOITRE.—The *Riforma medica* attributes the following to Kant:

℞ Sulph. of duboisine, gr. 1 1/4.

Aq., m 75.

M. Sig. To be taken two or three times a day.—*N. Y. Med. Jour.*

"IODOTHYREIN."—This substance, more properly called *thyreoiodinin*, is the subject of a long article, by Lancereaux and Paulesco, the publication of which is begun in the *Journal de médecine interne*. The authors deal more particularly with the effects of the remedy in such so-called "rheumatismal" affections as chronic

rheumatism, gout, arteriosclerosis, vaso-motor and trophic disturbances of the extremities, and scleroderma. They give a history of a case of generalized scleroderma in a young woman. She was much improved after four months' use of the remedy, which was to be continued.

The next case was that of a woman with "herpetism" and vaso-motor disturbances of the limbs. The slightest exposure to cold caused blanching of the fingers and toes. Under the influence of thyroiodinin this trouble was much improved, and the profuse sweats and salivation with which the patient was also affected subsided entirely.

The third and fourth cases were those of men with "herpetism," chronic rheumatism and gout, generalized arteriosclerosis, hypertrophy of the heart, and renal sclerosis. Both were benefited in many respects by the treatment.—*N. Y. Med. Jour.*

ALOPECIA.—

R Resorcin, 3 ij.
Salicylic acid, gr. xxx.
Castor-oil, fl. 3 j.
Rectified spirit, fl. 3 vj.
Oil of bergamot, fl. 3 j.

M. Rub well into the scalp every night.

When greater stimulation is desired, one may use:

R Mercuric chloride, gr. xij.
Betanaphthol, gr. 40.
Castor-oil, fl. 3 ij.
Rectified spirit,
Bay rum, aa fl. 3 iij.

Schamberg, Polyclinic.

INJECTIONS OF GELATIN IN ANEURYSM.—Dr. Harold Moyer (*Medicine*) says that a review of the recent literature justifies the following conclusions: (1) Gelatin solutions are of some value in the treatment of saccular aneurysms. (2) They are of no value in diffuse enlargements of a vessel. (3) The remedy is used empirically, the experimental work affording little or no basis for the treatment. (4) Solutions not stronger than one per cent. should be used. (5) Great care should be exercised in technique; failures in asepsis are easily made, as the solution is a good culture medium. The solutions should be kept in a brood oven to determine

bacterial growth. (6) There may be dangers in the treatment, but the observations heretofore made are insufficient to indicate what they are. (7) Absolute rest in bed should be enjoined, and other remedies suitable for these cases may be given at the same time. (8) It is not a cure for aneurysm, but may rank in the future as a treatment. (9) The method is worthy of more extended trial. *N. Y. Med. Jour.*

ACNE.—

R Acidi arsenosi, gr. j.
Massæ ferri carbonatis, 3 iss.
Aloini, gr. vj.

M. et ft. pil. No. xxiv. Sig. One pill after meals. *Indications:* When associated with anemia. Arsenic is contraindicated in all acute cases with inflammation.

R Syr. ferri iodidi, fl. 3 ij.
Olei morrhue, fl. 3 iv.

M. et pone in capsulas No. xxiv. Sig. One capsule two hours after meals. *Indication:* When anemia and struma exist.

R Magnesii sulphatis, 3 ij.
Ferri sulphatis exsiccati, gr. xvj.
Acidi sulphurici diluti, fl. 3 ij.
Infusi quassiae, q. s. ad fl. 3 viij.

M. Sig. Tablespoonful before breakfast. *Indications:* Complicated by anæmia and constipation. A disagreeable dose although valuable in many cases.

R Huile de cade, 3 ss.
Adipis preparat, 3 j.

M. et ft. ungt. Sig. Apply night and morning.—*Tilbury Fox.*

R Magnesii sulph., 3 j.
Ferri sulph., gr. viij.
Acidi sulphurici ar., fl. 3 j.
Aq. menth. pip., fl. 3 iv.

Sig. Tablespoonful in cup of water, p. r. n.—*Duhring, Dominion Medical Monthly.*

PNEUMONIA IN VERY YOUNG CHILDREN.—Dr. L. Emmett Holt (*Medical News*) concludes as follows: (1) No depleting measures are ever admissible. (2) Hygienic treatment, including fresh air, proper feeding, and intelligent care, is of the utmost importance. (3) No unnecessary medication should be permitted. (4) Many annoying symptoms may be relieved by local treatment, such as

cough by inhalations, pain by counter-irritation, restlessness by the ice-cap, or sponging. (5) Stimulants should be deferred until demanded by the condition of the pulse. (6) High temperature is much more safely and effectively controlled by the use of cold than by drugs. (7) Greater caution is necessary in the use of powerful stimulants than is generally observed. (8) Rest is quite as important as in other serious diseases.—*Kansas City Med. Rec.*

BED SORES.—

℞ Argenti nitratis, gr. 40.
Aq. dest., fl. ʒ 2.

M. Sig. Paint red and tender spot daily. *Indications:* To be employed over red sore spots which threaten to break. Also employed if surface ulcerates.

℞ Hydrarg. perchlor., gr. ij.
Spir. rect., fl. ʒ j.

M. Sig. Use locally.—*Erichsen.*

℞ Alumin,
Sodii chloridi, aa ʒ ss.
Aq.,
Alcoholis, aa Oj.

M. Sig. For local use, twice daily. (To prevent bed sores.) — *Forbes, Dominion Med. Mon.*

COMPOUND IODOFORM POWDER FOR THE DRESSING OF UTERINE ULCERS. The *Gazette hebdomadaire de médecine et de chirurgie* gives the following:

℞ Finely sifted iodoform,
Powd. cinchona,
Powd. benzoin,
Powd. carbonate of magnesium saturated with ess. of eucalyptus, aa equal parts.

M.—*N. Y. Med. Jour.*

PRESERVATION OF ORGANIZED SEDIMENTS.—Treat the sediment with the following solution:

℞ Aq. dest., grm. 200.0.
Sodium chloride, grm. 1.0.
Sodium sulph., grm. 5.0.
Mercuric chloride, grm. 0.5.

Let settle for twenty-four hours, pour off the solution and wash a few times with distilled water. All constituents of the sediment will present themselves in their unaltered shape and structure, just as they are found in the urine. To obtain a colorless specimen, take with the pipette some sediment in a little gly-

cerine on a slide and close with turpentine or mastix. Colored preparations are obtained by drying some of the sediment on the air and subjecting it for about an hour to a saturated aqueous solution of methylene blue, after which it is washed with distilled water. After drying, bring under the cover-glass with damar.—*Prog. of Med. Sci.*

PALATABLE EFFERVESCENT QUININE. The *Internat. Med. Mag.* gives the following useful formula:

℞ Quininae sulph., 4.
Acidi citrici, 10.
Syr. simplicis,
Syr. aurant. cort., aa 1.
Aq. dest., q. s. ad 20.

M. Sig. Add 10 or more drops to about 50 grm. of water in which 0.3 grm. of bicarbonate of sodium has previously been dissolved, and drink while effervescing. — *Klin. therap. Woch'schrift.*

THE DIAGNOSIS OF SCARLET FEVER. The diagnosis of scarlet fever is not always easy, and Lindsay has very well summarized the main points to be borne in mind. These are:

1. Initial vomiting, very constant in children under ten, less so above that age, and rare in measles, German measles and diphtheria.
2. Undue frequency of pulse—say 140 to 150—out of proportion to the other symptoms.
3. The rash beginning on the upper part of the chest, over the clavicles and about the flexures of the neck, often well marked on the back of the waist.—*Ex.*

MUSCULAR RHEUMATISM.—

℞ Ichthyol-sodium, 3 i-v.
Olive-oil, m xxx-fl. ʒ j.
Lanolin, 3 x.

Apply where there is pain.—*Petella; Tobold.*

℞ Ichthyol, 3 vj.
Absolute alcohol,
Ether, aa fl. ʒ vj.

Embrocation.—*Eulenburg; Koetsehan, Merck's Arch.*

DRESSING BURNS.—In dressing burns of the second, third or fourth degree, the results to aim at are: 1. The selection of a dressing which requires re-application only as seldom as pos-

sible. 2. That the choice of one that can be easily moistened when it has to be changed, and the foundation of which is not too woolly, so as to prevent sticking to the parts beneath. 3. To exclude as much moisture as possible, and absorb any serous effusion as soon as it reaches the surface. 4. A dressing that shall be aseptic, and, if possible, antiseptic. 5. To exclude air. 6. To relieve pain. *Louisville Med. Mon.*

ADENITIS.—

R Syr. ferri iodidi, fl. ℥ j.

Sig. Five drops in milk after meals. *Indication:* Of value when accompanying scrofulosis and anemia.

R Ol. morrhuae, fl. ℥ ij.
Ol. gaultheriae, m vj.
Acaciae, 3 iv.

Aq., q. s. ad fl. ℥ viij.

M. et ft. emulsum. Sig. One to two teaspoonfuls in milk or water two hours after meals. *Indication:* To be employed in tubercular or scrofulous adenitis.

R Hydrarg. cum creta, gr. xxiv.
Pt. chart. No. xxiv. Sig. One powder three times a day. *Indication:* In adenitis of hereditary syphilis.—*Dominion Med. Mon.*

TO EXPEL TAPEWORM.—A *Medical Summary* writer directs: One drop of croton oil dissolved in thirty drops (about fifteen minims) of chloroform and one ounce of glycerin, given at night on an empty stomach. Follow this in the morning by a sufficient quantity of castor oil to purge well, and the tapeworm—head and all—will come out with the purgation. *Louisville Med. Mon.*

LUMBAGO.—

R Phenacetine,
Salol, aa 3 ij.

M. et ft. powd. No. xxiv. Sig. One every four hours.—*Med. News.*

WARTS.—Louvel-Dulongpre (*Med. Neuigkeiten*) advocates the following painless treatment, which also has the advantage of leaving no cicatrix. A concentrated solution of bichromate of potash in boiling water is prepared by gradually adding to the latter enough of the salt to make a saturated solution. On cooling a

certain quantity of the salt will again be precipitated. The supernatant fluid is to be applied once a day by means of a brush.—*Louisville Med. Mon.*

FOLLICULAR TONSILLITIS.—

R Trichloracetic acid, gr. iiij.
Sodium, gr. viij.
Potassium iodide, gr. xv.
Glycerin, 3 iiij.
Aq. dest., 3 v.

M. Sig. After incising, paint with the above.—*Med. Rec.*

SODIUM CHLORIDE IN TUBERCULOSIS.

S. Knopf has for some time past directed his patients afflicted with pulmonary tuberculosis to eat as much table salt as possible with their food. The free ingestion of the salt seems to make the expectoration less tenacious and to increase the feeling of well-being. He does not order it as a medicine.—*Merck's Arch.*

EPILEPSY.—

R Potassii iodidi, 3 i.
Potassii bromidi, ℥ 2.
Ammonii bromidi, 3 2½.
Potassii bicarbonatis, gr. 40.
Infus. calumbæ, q. s. ad ℥ 6.

M. Sig. A teaspoonful before each meal, and three teaspoonfuls at bedtime with a little water.—*Brown-Sequard, Med. Rec.*

CHRONIC SCIATICA.—The following stimulating liniment is recommended:

R Ol. terebinthinae,
Ac. acetici, aa 3 vj.
Camphoræ, 3 iiij.

M. Sig. External use.—*Louisville Med. Mon.*

ERGOT IN SPERMATOCELE.—Bece-lære, in a case of spermatocele the diagnosis of which was confirmed by aid of the microscope, succeeded in producing a permanent cure by injecting 60 minims of normal liquid ergot after evacuating the contents of the hydrocele-like tumor under antiseptic precautions with a small caliber trocar. The inflammatory phenomena that followed were decidedly mild as compared with those following iodine injections. There was less pain, less edema, moderate epididymitis, and subsidence was

rapid. Patient was about the room on the fourth day, wore a suspensory bandage for two weeks, and soon left it off entirely. There was no sign of the reappearance of the fluid when the patient was last seen, although three months had passed, and the testicle appeared to be as sound and healthy as before.—*Medical Age*.

SWAIM'S VERMIFUGE.—

℞ Worm seed, ʒ ij.
Valerian,
Rhubarb,
Pink-root,
White agaric, aa ʒ iss.

Boil in sufficient water to yield three quarts of decoction, and add the following oils dissolved in a quart of rectified spirits:

Ol. tansy, *m xxx*.
Ol. cloves, *m xiv*.

Secret Nostrums and Systems.

ALOPECIA AREATA. — Dr. Joseph Sprangenthal (*Buffalo Medical Journal*) reports a case of this obstinate affection successfully treated by the following application:

℞ Bichloride of mercury, gr. xx.
Glycerin, ʒ iv.
Eau de cologne, ʒ xviii.

M.

He says: "Under this treatment not only did the baldness cease to spread, but fine downy hair began to spring up all over the bald patches. This at first was white, but finally the growth became more vigorous the pigment returned, and in about twelve months after the commencement of the disease the patient had fully recovered."—*N. Y. Med. Jour.*

BEECHAM'S PILLS.—

℞ Saffron,
Sulph. sodium, aa gr. xxiv.
Rhubarb, ʒ iss.
Aloes, ʒ j.

M. Make into three-grain pills.—*Indiana Pharmacist.*

PICRIC ACID IN THE TREATMENT OF ENTERO-COLITIS.—In the treatment of entero-colitis muco-membranosa Chéron recommends clysters of picric acid. In the morning an evacuator enema should be used. It should consist of a litre of water with a half tablespoonful of boracic acid. After the stool a second enema consisting

of a one-quarter litre of water, to which a teaspoonful of the following solution has been added:

℞ Acid picric, i.o.
Aq. dest., 120.0.

This second enema should be held a long time. The picric acid acts directly upon the epithelium.—*Ther. d. Gegenw, Ex.*

THE NEW TREATMENT OF HEMORRHAGE.—Carnot has recently called attention to the value of hypodermic injections of sterilized gelatin solutions for the purpose of increasing coagulability of the blood in general. He also mentions that the local use of these solutions is exceedingly valuable in controlling capillary or oozing hemorrhage, where compresses fail to produce the results desired, and this substance often suffices when preparations of the iron and the acids fail. When employed as an injection it is absolutely essential that the solution is sterile. The solution used by Carnot is gelatin 12 drachms, chloride of calcium 2½ drachms and water one quart. One or two ounces of this solution is given under the skin into the loose subcutaneous tissues of the back or thighs. It is said to act very speedily in causing coagulation at the bleeding point. When the solution is applied to the exposed bleeding points care must be taken after the gelatin is applied to prevent putrefactive changes. This is especially so in cases of nasal wounds. There is some danger with the hypodermic injections of producing hyper-coagulability of the blood. Carnot thinks that when it is necessary to give such injections it is best to give the calcium chloride itself.—*Therapeutic Gazette.*

AYER'S HAIR VIGOR.—

℞ Acetate of lead, 3.
Flowers of sulphur, 2.
Glycerin, 14.
Aq., 70.

—*Jour. d' Hygiène Pop.*

STOMATITIS IN SMOKERS.—

℞ Salol, i.
Tinct. catechu, 2.
Spir. menth. pip., 50.

M. Sig. A teaspoonful in a glass of warm water as a mouth wash.—*Med. Rec.*

ACUTE RHEUMATISM.—

℞ Fl. ext. cimicifuga, fl. 3 ij.
 Fl. ext. colchicum-seed, fl. 3 j.
 Sodium salicylate, 3 ij.
 Aq., fl. 3 ij.
 Simple syr., to make fl. 3 iv.

Teaspoonful every three or four hours in cases with pale mucous membrane and white-coated tongue.

℞ Fl. ext. cimicifuga (green root),
 Fl. ext. colchicum-seed, aa
 fl. 3 ij.

Potass. acetate, gr. xxx.

Simple syr., to make 3 iv.

Teaspoonful every three or four hours for cases with a deep-red tongue.—*Ball, Med. Summary.*

APPLICATION IN PERITONSILITIS.—As a local application in peritonsillitis Dr. K. Baldwin uses spirits turpentine and compound spirits lavender, equal parts, the taste disguised by a few drops of oil of anise or gaultheria. Apply thoroughly all about the tonsils and pillars of the fauces every one or three hours.—*Louisville Med. Mon.*

PAINFUL MENSTRUATION.—For painful menstruation not due to mechanical obstruction:

℞ Antipyrin, gr. x-xv.

Potassium bromide, 3 j.

Sig. Give in water.—*Louisville Med. Mon.*

BERBERINE IN THE TREATMENT OF MALARIAL SWELLING OF THE SPLEEN. Typaldo Lascarato (*Grèce médicale; Indépendance médicale*) says that berberine, in addition to its bitter tonic action, has the faculty of causing the elastic fibres of the spleen to contract, especially when that organ is enlarged, in a manner similar to that of ergotine on the muscular fibres of the uterus. This is not entirely free from danger, as, if it is not administered with caution, its action may be so severe as to rupture the swollen spleen and cause fatal hæmorrhage. But berberine, by rapidly and abruptly contracting the parenchyma of the spleen, drives from it *en masse* the paludal parasites which swarm in it toward the general circulation, from which arises a fresh access of pyrexia. The administration of berberine has often been known to be followed by a brusque elevation of

temperature. Many physicians have on this account considered berberine more harmful than useful. However, the author points out, this action of berberine in driving the parasites from the spleen, which is their place of election, into the general circulation is very favorable to the complete destruction and disappearance of the paludal miasm from the entire organism. The parasites expelled from the parenchyma of the spleen are spread through the general circulation at a very inopportune period of their evolution, when they engage in a deadly struggle with the phagocytes of the blood to which they easily succumb. To aid this result, the Italian physicians, who have had considerable experience with this remedy, advise its use always simultaneously with quinine, which attacks them more readily in the blood when driven out by the berberine from the spleen. In all cases of swollen spleen, therefore, save those of too old standing or the ultimate result of advanced hypertrophy or degeneration of the organ, berberine is highly commended by the author. It is given in a daily quantity of from a grain and a half to fifteen grains, according to the age of the patient, and always in combination with quinine. A favorite Italian prescription is as follows:

℞ Hydrochloride of berberine,
 gr. xv.

Bisulphate of quinine, gr. viiss.

M.

To be divided into four powders, and one taken every half hour or hour, for an adult.—*N. Y. Med. Jour.*

A TOPICAL APPLICATION FOR ACUTE ARTICULAR RHEUMATISM.—The *Riforma medica* gives the following formula:

℞ Ext. of hyoscyamus, parts 5.

Iodoform, parts 10.

Sodium salicylate, parts 30.

Vaseline, parts 100.

M.—*N. Y. Med. Jour.*

ACUTE BRONCHITIS IN OLD PEOPLE.

℞ Sodium iodide, gr. 90.

Codeine sulphate, gr. 5.

Fl. ext. grindelia, fl. 3 6.

Syr. tolu, to make fl. 3 3.

Teaspoonful every three hours.—*Patton, Clinical Review.*

BRONCHITIS.—

℞ Tinct. aconiti, gtt. xij.
Syr. ipecac, fl. ʒ ss-j.
Liq. potassii citratis, q. s. ad
fl. ʒ iiij.

M. Sig. One teaspoonful every three hours.

℞ Apomorph. muriat., gr. $\frac{1}{3}$ - $\frac{2}{3}$.
Acid muriat., gtt. iiij.
Aq., fl. ʒ iiss.

M. Sig. Teaspoonful every hour or two. (Keep in a dark glass.)—*Kinder-Arst.*

℞ Vini ipecac, fl. 3 ij.
Vini antimonialis, 3 fl.j.
Vini xerici, fl. 3 iiij.

M. Sig. Three drops every hour to a child six months' old.—*Dessau.*

℞ Capsulæ morrhuel No. xxiv.

Sig. One after each meal and at bedtime. (In chronic forms.)—*Lafargue, Dominion Med. Mon.*

NEUROSES.—Arsenic is one of the best medicinal agents at our command in various neuroses. In chorea it may almost be regarded as a specific. It should be given in doses of three to five minims of Fowler's solution and gradually increased. Children bear the medicine extremely well and doses of fifteen drops three times a day can often be given. Osler says he has frequently given twenty-five drops three times a day. The best effects are obtained when the full physiological action becomes manifest. In older children and adults it may be given by hypodermic injection.—*Louisville Med. Mon.*

FLEXIBLE IODOFORM.—Fowler, according to the *Journal de Medecine de Paris*, gives the following:

℞ Iodoform, gr. 450.
Fish glue, gr. 3,600.
Glycerine, m 330.

M. Gelatinize the fish glue by vapor and add the other substances. The product has a suitable consistence for topical application.—*N. Y. Med. Jour.*

VITA NUOVA.—This nostrum, advertised to be free from alcohol, was found by an analysis (*Journal of Health*) to contain between eighteen and nineteen per cent. of alcohol.

Cocaine was found in appreciable quantities by R. G. Eccles (*Druggists' Circular*).

Recent examination shows cocaine in notable quantities and 19.5 per cent. by volume of alcohol.—*New Idea.*

ORTHOFORM IN TOOTHACHE.—Dr. Hildebrandt asserts that orthoform causes to cease completely the violent pain due to inflammation of the pulp of a decayed tooth. To this end, it is sufficient to introduce into the cavity of the tooth a plug of cotton steeped in an alcoholic solution of orthoform. The pain instantly disappears and for a considerable time. Being absolutely deprived of any toxic properties, orthoform constitutes in such cases a simple remedy and one which the patient can apply himself without danger.—*Med. Press.*

ASTHMA.—

℞ Ext. euphorbiæ piluliferæ fl.,
fl. ʒ j.

Sig. Thirty to sixty drops as required.—*Payne.*

℞ Pulv. stramonii fol.,
Pulv. belladonnæ fol., aa ʒ j.
Pulv. potass. nit., 3 iss.
Pulv. opii, gr. xv.

M. Sig. Burn a little and inhale the fumes.

℞ Potass. iodid., 3 viiss.
Tinct. lobeliæ, fl. 3 viiss.
Aq. dest., fl. ʒ xvss.

M. Sig. From a tea to a tablespoonful in a glass of beer before meals.—*Dujardin-Beaumets, Dominion Med. Mon.*

HEAT AS A HÆMOSTATIC.—Heat either in form of actual cautery or in that of water heated from 120 to 140° F. is a very excellent hæmostatic under certain conditions. Demonstrations of the value of the actual cautery are seen in the operations for hemorrhoids with the clamp and cautery. In large oozing surfaces compression with towels in hot water is an excellent means of stopping capillary hemorrhage.—*Louisville Med. Mon.*

TONSILLITIS.—

℞ Sodium benzoate, 3 i-4.
Glycerin,
Elix. calisaya, aa ʒ i.

M. Sig. Teaspoonful every hour or two.—*Stevens, N. Y. Polyclinic.*

LEUCORRHEA.—

℞ Acidi tannici, $\frac{3}{4}$ vj.

Glycerin, $\frac{3}{4}$ xvj.

M. Sig. One-half ounce to one pint of tepid water. Inject for five minutes into the vagina night and morning.

℞ Cupri sulphatis,
Zinci sulphatis,
Alum sulph., aa 3 iss.
Glycerini, $\frac{3}{4}$ vj.

M. Sig. Injection.

℞ Acidi borac., 3 j.
Aq., tepid, Oj.

M. Sig. Injection. — *Louisville Med. Mon.*

STRICTURE OF ŒSOPHAGUS CURED BY ELECTRICITY.—In the *Journal of Electro-Therapeutics* Dr. H. C. Bennett reports the cure of a case of œsophageal stricture by electrolysis. Such cases as these are the most gratifying in surgery when followed by such results.—*Southern Clinic.*

FOLLICULAR PHARYNGITIS.—

℞ Iodine, gr. iij.
Potassium iodide, gr. v.
Trichloroacetic acid, gr. viij.
Glycerin,
Aq., aa fl. 3 iv.

Apply locally and vary the strength to meet the case.—*Tri-State Med. Jour.*

ACUTE TONSILLITIS.—Dr. Geo. Fay in the *Atlanta Med. and Surg. Jour.* recommends the following:

℞ Tinct. aconite, 3 ss.
Chloroform-aq., $\frac{3}{4}$ ij.
Distilled aq., $\frac{3}{4}$ iv.

A teaspoonful every five minutes for twelve doses; afterwards a dose every hour. If necessary repeat the mixture and direct the repetition to be taken as before, beginning with five-minute doses.—*Med. Fortnightly.*

BITES OF INSECTS, ETC.—

℞ Liq. ammon.,
Collodii, aa gtt. 90.
Acid salicyl., gr. 3.

M. Sig. Apply a drop upon each bite.

℞ Naphthaline,
Vaselin, aa q. s. ad saturated.

M. Sig. Rub in a few drops every three or four hours. (For bites of insects and bee stings.)—*Louisville Med. Mon.*

A DOUCHE FOR NASAL CATARRH, OZÆNA, ETC.—

℞ Antikamnia and codeine tablets, No. xxiv.

Sig. Crush and dissolve six tablets in a pint of tepid water and use one-third as a douche three times a day. Shake well before using.—*Louisville Med. Mon.*

PULVIS CUTICOLOR.—By Dr. P. G. Unna (*Monatsheft. f. Praktisch. Derm.*).

The author recommends the following formula as a powder for coloring the skin:

℞ Zinc oxid., 2.0.
Mag. carb., 3.0.
Boli albæ, 3.0.
Boli rubræ, 2.0.
Amyl oryzal, 10.0.

The powder is also of value in seborrhœic eczema of the face, rosacea and hyperidrosis oleosa.—*Post-Graduate.*

TUBERCULOUS LARYNGITIS.—To relieve the vomiting following as the result of a morning's bout of coughing:

℞ Menthol,
Sulphuric ether,
Ol. pini sylvestris,
Tinct. iodii, aa 3 ij.
Tinct. benzoin comp., ad $\frac{3}{4}$ ij.

M. Sig. Ten or more drops to be dropped on the sponge of an oronasal inhaler, to be worn indoors as often and as long as is convenient. *Fowler, Intercolonial Med. Jour. of Australasia.*

HEMICRANIA. — Robin (*Riforma medica*) recommends:

℞ Antipyrine,
Bromide of potassium, aa gr. 7½.
Hydrochl. of cocaine, gr. $\frac{1}{100}$.
Caffeine, gr. $\frac{3}{100}$.
Powd. paulliniasorbilis, gr. 4½.

M. For one powder. Take one powder at the end of the first crisis. *Kansas City Med. Rec.*

AGREEABLE SALICYLIC MIXTURE.—

℞ Potassii acetatis, $\frac{3}{4}$ ij.
Acidi salicylatis, $\frac{3}{4}$ ss.
Syr. limonis, $\frac{3}{4}$ ij.
Aq. menth. pip., $\frac{3}{4}$ viij.

M. Sig. Teaspoonful every three hours.—*North Amer. Prac.*

ADDISON'S DISEASE.—

R Ext. glandulæ suprarenalis,
3 ij.

Pone in capsulas No. xxiv. Sig. One capsule three times a day after meals.

R Arseni iodidi, gr. iss.
Quinine hydrochloratis,
Massæ ferri carbonatis, aa 3 j.
Aloini, gr. v.

M. et ft. pil. No. xxx. Sig. One pill three times a day after meals. *Indication:* Used to overcome the anemia.

R Ext. nucis ymnica, gr. xij.
Ol. morrhue, fl. 3 j.

M. et pone in capsulas No. 48. Sig. One capsule two hours after meals, to be increased to two capsules at each dose. *Indication:* Used in debilitated asthenic subjects.—*Dominian Med. Mon.*

ACUTE RHEUMATISM.—

R Ichthyol, part i.
Olive ol., parts 3.

M. Sig. Externally. Paint the joints night and morning.—*Unna, Merck's Arch.*

BENZOATE OF SODA IN THE TREATMENT OF GRIPPE.—According to *Medical News*, no drug has given more favorable results in the treatment of grippe than benzoate of soda. It may be given in capsule or powder form, the usual dose being ten grains three or four times a day. When muscular symptoms are pronounced the following combination acts admirably:

R Sodii benzoas, 3 ij.
Salol, 3 j.

Phenacetin, gr. xxxvj.

M. et ft. chart. No. xij. Sig. One powder every four hours.—*Prac. Med.*

MYRINGITIS.—

R Acidi boracici, 0.3.
Cocainæ muriat., 0.5.
Aq. dest., 10.

M. Sig. Fifteen drops into the ear three times a day.—*Gruber, Ex.*

NEPHRITIS.—The *Revue médicale*, quoting the *Journal de médecine de Paris*, attributes the following prescription to Neumann:

R Nitroglycerin, gr. 15.
Rect. alcohol, gr. 150.
Aq. dest., gr. 600.

M. Sig. Eight drops to be taken in three divided doses in the day. If the medicament is well borne, the daily amount may be raised to twelve drops.—*N. Y. Med. Jour.*

SOFT CORNE.—

R Iodine, gr. ij.
Flexible collodion, fl. 3 iij.
Alcohol, fl. 3 j.
Potassium iodide, gr. ij.

M. Sig. Paint the corn every night.—*Pacific Rec. of Med. and Surg.*

MERCURIAL STOMATITIS (SALIVATION).—

R Acidi lactici, m xv.
Magnesi carb., 3 j.
Ol. menth. pip., gtt. x.

M. et ft. pulv.

Or:

R Acidi salicylici, 3 ss.
Magnesi carb., 3 j.

M. et ft. pulv. Sig. The teeth should be carefully cleaned several times a day with one of the above powders.—*Roth, Med. Rec.*

PERNIONES.—

R Acidi nitrici puri, 3.
Aq. dest., 60.

M. Sig. Apply locally.

Or:

R Iodi puri, 0.5.
Collod. elast., 20.

M. Sig. Pencil.—*Gussenbauer, Med. Rec.*

POST-PARTUM HEMORRHAGE.—

R Ergotin, 3 ij.
Chloral, 3 ss.
Aq. dest., q. s. ad 3 j.

M. Sig. Ten or twenty minims injected deeply into the muscles of the buttock.—*Simpson, Med. Rec.*

LATER STAGES OF GONORRHEA.—

R Terebinth. alb., 3 j.
Res. podoph., gr. ss.
Camphor monobrom., 3 j.

M. et ft. pil. No. xxx. Sig. One pill four times a day.—*The Med. Bull.*

DYSMENORRHEA.—

R Ext. conii alc., gr. xy.
Ext. scammonii alc.,
Ext. opii, aa gr. v.

M. ft. pil. No. x. Sig. One pill three times a day.—*Gaillard's Med. Jour.*

ALOPECIA.—

℞ Aq. ammoniæ, fl. 3 iv.

Glycerini, fl. 3 j.

Aq., q. s. ad fl. 3 vj.

M. Sig. Apply once daily. *Indication:* Used in presenile and syphilitic alopecia.

℞ Pilocarpinæ hydrochloratis, 3 ss.

Ol. lavandulæ, *m* xv.

Ol. amygdalæ expressi, fl. 3 iv.

Adipis lanæ hydrosi, q. s. ad 3 ij.

M. Sig. Apply freely at bedtime. *Indications:* Used in hereditary presenile alopecia. The scalp should be daily shampooed with Johnson's ethereal soap and water, well dried, and the application made. Also of value in syphilitic alopecia accompanied by constitutional treatment.

℞ Tinct. cantharidis, fl. 3 ij.

Acidi acetici diluti, fl. 3 ij.

Sodii boratis, 3 ij.

Glycerini, fl 3 iv.

Aq. rosæ, q. s. ad fl. 3 vj.

M. Sig. Apply freely night and morning. *Indication:* Used in presenile and syphilitic alopecia.—*Dom. Med. Mon.*

BARLEY WATER.—Barley water is prepared by adding a tablespoonful of barley to one pint of scalding hot water, allowing it to stand for an hour or so and then straining. In infantile diarrhoea it is often all that is required to effect a cure. Oatmeal water is made after the same method. It is a most efficient laxative for infants, as the cereal is for adults.—*Ex.*

PERTUSSIS.—

℞ Phenocol hydrochloride,

Antipyrin, aa gr. viiss.

Potassium bromide, gr. vj.

Syr. bitter orange peel,

Orange-flower aq., aa q. s.

M. Sig. Divide into four doses and give all in 24 hours to a child of eight years. — *Guaita, The Med. Times.*

INFANTILE CONSTIPATION.—Dr. L. Emmett Holt has said that the conditions found in young children were such as to make the treatment of constipation in these little patients proportionately easy and satisfactory. He always insisted upon a careful scrutiny of the whole of the child's

daily life. The nurse was often to blame for the constipation in the infant. In infants under six months of age constipation was often due to the use of modified milk in too small percentages, so that too little residue was left. Under such circumstances the indication was to increase the total solids. The bad cases of chronic constipation in children of five or six years of age that he had seen had been almost without exception in children who were exceedingly healthy and robust. He could heartily recommend cascara as being probably the most valuable drug in the treatment of cases in which there was loss of expulsive power. Still better than drugs, in his opinion, were suppositories.—*Med. Rec.*

DRY BRONCHITIS WITH PAROXYSMAL DYSPNOEA. — The *Riforma medica* gives the following:

℞ Alcohol solution of nitroglycerin (1 per cent.), gtt. 12.

Alcoholic nitric ether, gr. 225.

Solution of chloroform in alcohol (10 per cent.), gr. 120.

Aq., gr. 2,400.

M. A tablespoonful to be taken every three or four hours.—*N. Y. Med. Jour.*

CONSTIPATION OF MUSCULAR ORIGIN. Constipation of muscular origin in women, the result of pregnancy, and implicating the abdominal and perineal muscles, should not be treated by purgatives. Use massage and proper gymnastic exercises. The diagnosis is made by observing the feeble abdominal constriction.—*Pineus, Ex.*

BLACKHEADS.—

℞ Ichthyol,

Bismuth subnitr.,

Ammoniat. mercury, aa 3 j.

Vaseline, 3 x.

M. ft. ungt. Sig. Apply at night. *Louisville Med. Mon.*

CARDIAC STIMULATION FOR A CHILD.

℞ Spir. etheris comp., *m* 80.

Tinct. nucis vomicæ, *m* 40.

Tinct. lavandulæ comp., *m* 80.

Aq. cari., q. s. ad 3 4.

M. Sig. One tablespoonful every four hours to a child of eight to twelve years.—*Ashby, Med. Rec.*

ABORTION (To prevent).—

- ℞ Tinct. opii deodorati, fl. 3 ij.
 Chloralis, 3 ij.
 Ext. hyoscyami fl., fl 3 j.
 Syr. acaciæ, fl. 3 iv.
 Ext. viburni prunifolii, q. s. ad
 fl. 3 iij.

M. Sig. One or two teaspoonfuls every hour or two until moderate somnolence. *Indications:* In threatened abortion, give in sufficient doses to secure the continuous moderate effects of opium and chloral. Complete rest in bed, light diet, and daily moderate evacuation of bowel.

- ℞ Ext. opii,
 Ext. hyoscyami alcoholici, gr. iij.
 Ol. theobromatis, q. s.

M. et ft. suppositoria No. vi. Sig. One by bowel as required. *Indications:* In threatened abortion employ every hour, or two until somnolence. Bowels to be moved daily by mild laxative of cascara, or saline, or by an enema.

- ℞ Hydrargyri iodidi flavi, gr. x.
 Sacchari lactis, q. s.

M. et ft. tabellæ No. 40. Sig. One after meals. *Indications:* In habitual abortion due to syphilis. Increase dose until slight soreness of gums or tendency to diarrhœa, then reduce to tonic dose. Continue during pregnancy.—*Dominion Med. Mon.*

TREATMENT OF MIGRAINE. — Dr. Henry Hanford, in an article on migraine and the vasomotor theory, speaks of the treatment as follows: "It is well known that when with headache the extremities are cold, some relief is obtained by warming the hands and feet at the fire. In many cases the recumbent position is required in addition. In a large class of patients the attack may be cut short by many hours by going to bed, applying hot bottles to the extremities, and taking hot drink (as soon as the stomach will retain it)—some hot tea or milk. A glow soon pervades the surface, and the spasm is relaxed. Relief so obtained is not very liable to relapse. After a few hours the ordinary duties of life may be resumed, and, although sleep is the best completion of the cure, its place may sometimes be taken by a good dinner. I believe this treatment, when it can be carried out, to

be far superior to any drug treatment, although it may be aided by a good dose (thirty to sixty grains) of bromide of potassium. It is a curious fact, and may be taken as the exception which proves the rule, that a few patients find that the recumbent position aggravates their pains, and often prefer to spend the night in an arm chair rather than go to bed. And also, in the last stages, moving about sometimes seems to hasten the end of the attack more than remaining quiescent."—*Edinburgh Med. Jour.*

INFANTILE DIARRHŒA.—A writer in the *Med. Sum.* gives the following formula as one he has used with great success for the past twenty years in cases of infantile diarrhœa:

- ℞ Syr. rhei aromatic,
 Mucil. acacia, aa 3 j.
 Bismuth subnitrat., 3 j.
 Spir. ammon. aromat.,
 Syr. ipecac, aa gtt. xx.

M. Sig. A teaspoonful every three hours to a child one year old. *Ex.*

BATHS IN TYPHOID.—The good effects of baths in typhoid are: (1) The reduction of the fever. (2) The intellect becomes clearer, the stupor lessens, and the muscular twitchings disappear. (3) A general tonic action, particularly on the heart. (4) Insomnia is lessened, the patient usually falling asleep for two or three hours after each bath. (5) Most important of all, the mortality is, under this plan of treatment, reduced to a minimum.—*Osler, Ex.*

DIAPHORETIC POWDER FOR COLDS.

- ℞ Powd. camphor, gr. $\frac{1}{10}$ – $1\frac{1}{2}$.
 Powd. opium, gr. $\frac{1}{3}$ – $\frac{1}{2}$.
 Potassium acetate, gr. 3–4 $\frac{1}{2}$.
 Sugar, gr. 150.

M. Sig. To form one powder, which is put into a cup of tea and taken at bed-time.—*Gas. deg. osp. e del. clin.*

SNUFF IN CORYZA.—As a snuff in coryza the following may be used:

- ℞ Sod. biborate, pulv., 3 j.
 Thymol cryst., gr. xij.
 Cocaine muriat., gr. iij.
 Salol, 3 j.

Ex.

IODINE IN TREATMENT OF CHRONIC ECZEMA OF THE HANDS.—The *Revista de Medicina y Cirugia Practicas*, quoting the *Therapeutische Monatshefte* attributes the following formula to Edlefsen;

R Iodine, gr. 1½.
Potassium iodide, gr. 4.
Glycerin, gr. 180.

M. Sig. To be applied every night and the hands covered with compresses.—*N. Y. Med. Jour.*

INFANTILE INTESTINAL DISORDERS. Lavage of the intestines is of first importance in infantile intestinal disorders. It is usually accomplished by the use of a number eleven or twelve soft rubber catheter and a fountain syringe with one or two quarts of warm water. The best result is obtained if the infant is placed on its abdomen across the nurse's knee, the water being at a temperature of 100° F., and a little soda or salt added to it. Great relief is obtained from the evacuation of the flatus and feces.—*Ex.*

ITCH OINTMENT.—In a series of experiments at the St. Luke's hospital, Paris, to determine what will cure itch in the shortest time, forty-one different preparations were employed. Of these the following ointment cured in the smallest number of days:

R Sublimated sulphur, ʒ ij.
Subcarbonate of potash, ʒ j.
Adeps simplex, ʒ viij.

M. Sig. Apply morning and night.

The writer of this has been in the habit of adding to the above the oil of bergamot, three drams, thus adding to the flavor and potency of the ointment.—*Modern Medicine.*

BELLADONNA IN BRONCHO-PNEUMONIA.—A. H. Frere says that the great value of belladonna in asthma and whooping-cough are well recognized and when we come to consider the main actions of this drug upon the nervous and vascular systems, we find there are many reasons why belladonna should prove of value in broncho-pneumonia. As an antispasmodic; as a stimulant to the cardiac muscles; as a stimulant to the vaso-motor and respiratory centers; and

lastly, as diminishing secretion, it must tend to relax the tubes, to obviate the stasis of the vessels around the bronchi, and facilitate the breathing. He says that he has been accustomed to employ iron in these cases with great benefit, having regard to the fact that this remedy increases the number of blood-corpuscles and the oxygen-carrying power of the same.—*Merck's Arch.*

NUTRIENT ENEMA IN CANCER OF THE STOMACH.—In case of obliteration of the cardiac or pyloric orifice, the following is recommended for rectal alimentation:

R Yolk of eggs, No. ii.
Dried papton, ʒ i-v.
Wine, ʒ iv.
Bouillon, ʒ viij.

M. Sig. For injection.—*Dominion Med. Mon.*

VERTICAL HEADACHE IN WOMEN. According to the *Richmond Jour. of Prac.* Dr. L. Duncan Bulkley recently stated at the New York Academy of Medicine that experience had taught him the fact, which, however, he could not explain, that full doses of strong nitric acid, five drops three times daily, properly diluted, almost invariably gave complete and prompt relief from that very common complaint of vertical headache and flushings in women.—*N. Y. Med. Jour.*

AN ENEMA FOR URTICARIA.—In the *Clinica moderna* we find the statement that in severe cases of urticaria benefit has been found to follow the use, four or five times a day, of an enema having the following composition:

R Sodium bicarbonate, gr. 300.
Laudanum, gtt. 30.
Boiled aq., gr. 7,500.

M. Sig. As improvement takes place the amount of sodium bicarbonate may be reduced gradually to seventy-five grains.—*N. Y. Med. Jour.*

POISONING BY CREOLIN.—Atropine, gr. ʒi, followed in half an hour by gr. ʒv, in child of five years. Artificial respiration. When the patient is able to swallow, magnes. sulphat, ʒ ss. in saturated solution.—*Antony Med. Rec.*

THE PRESCRIPTION

Therapeutic Cullings.

ALCOHOLISM.—

℞ Spir. ammoniæ aromatici, fl. ʒ
iij.

Sig. Teaspoonful in water every half hour. *Indication:* To relieve effects of acute alcoholism. To be followed by

℞ Hydrargyri chloridi mitis,
gr. v.

Pulv. jalapæ compositi, gr. xv.

M. et ft. chart. No. i. Sig. To be taken on tongue and swallowed with draughts of water. *Indication:* To relieve constipation.

℞ Morphinæ hydrochloratis, gr. j.

Ft. chart. No. iv. Sig. A powder in ten minims of water hypodermically at intervals of three or four hours. *Indications:* For relief of vomiting or insomnia.

℞ Tinct. nucis vomicæ, m 80.

Tinct. gentian comp.,

Tinct. calumbæ comp., aa fl. ʒ
ij.

M. Sig. Dessertspoonful before each meal in water.—*Loomis, Dominion Med. Mon.*

SIMPLE ACNE.—McKinney advocates as the remedy par excellence for simple acne, calcium sulphide. The proper dose is $\frac{1}{2}$ grain twice daily, and this dose should be steadily increased until four tablets are taken each day. If the taste is objected to, it may be disguised by sugar-coating or the drug may be given in capsules. In case of excessive gastric irritation, it may be desirable to begin treatment with $\frac{1}{10}$ or $\frac{1}{8}$ grain. In the acute stages of the trouble arsenic does no good. The physician should spend a little time at each visit in gently squeezing out the larger comedones, and curetting the smaller ones with the

comedone-extractor. The pustules should be lanced at the base in a slanting direction and the point of the needle or lancet swung around in the abscess cavity to break up its contents. An antiseptic can best be applied in the form of a soap containing sulphur or bichloride of mercury, with which the face can be washed at night.

The following are other good antiseptic preparations:

℞ Sulphur precip., 3 j.

Ether, fl. 3 iv.

Alcohol, fl. 3 xij.

External use.

The lotion should at first be applied only at night, but after the skin becomes accustomed to it, it may be used advantageously several times a day.

If an ointment is desired, it may be prescribed as follows:

℞ Sulphur precip., 3 j.

Rose water ointment,

Lanolin, aa 3 iv.

External use.

Another good combination is:

℞ Potassium sulphide,

Zinc sulphate, aa 3 j.

Aq., q. s. ad fl. ʒ iv.

External use.

If the skin remains discolored after the papules and pustules have subsided, an ointment of tar and sulphur, or ichthyol and sulphur should be used, rubbing it into the skin for a half hour each night. The use of very strong stimulants, as naphthol, resorcin, caustic potash, etc., is to be avoided, as their effect is often very injurious to the skin.—*Merck's Archives.*

EARACHE.—Atropine, in solution, is an excellent remedy for earache. A drop or two of a solution of four grains to the ounce of water will be sufficient.—*Louisville Med. Mon.*

A FORMULA FOR IRON AND CINCHONA.—The *Gazette hebdomadaire de médecine et de chirurgie*, citing *Nouveaux remèdes*, attributes to Dr. Patier the following formula based upon the solubility of tannate of iron in glycerin:

- ℞ Tartrate of iron and potassium,
Ext. cinchona, aa gr. 150.
Glycerin, gr. 300.
Aq. dest., gr. 150.
Madeira wine, q. s. ad 1 qt.

N. Y. Med. Jour.

URETHRAL ANÆSTHESIA BY RECTAL INJECTIONS.—M. Scharfe (*Gazette hebdomadaire de médecine et de chirurgie*) recommends the following:

- ℞ Hydrochloride of morphine,
gr. $2\frac{1}{4}$.
Sulphate of atropine, gr. $\frac{1}{10}$.
Aq. dest., m 750.

M. Sig. For external use.

An intrarectal injection of from thirty to sixty drops of this liquid is made to produce insensibility of the posterior urethra.—*N. Y. Med. Jour.*

URANIUM IN THE TREATMENT OF CORYZA.—The *Revue Médicale* gives the following formula:

- ℞ Uranium acetate, parts j–ij.
Aq. dest., parts xx.

M. Sig. Two or three drops to be snuffed up daily.—*Ex.*

SALICYLIC ACID ADMINISTERED CUTANEOUSLY.—Cullen says that Combe and Sigalas, of Paris, have called attention to the fact that if salicylic acid is mixed with some oily vehicle and applied to the skin, it may be detected in the urine in five minutes.

A favorite recipe is the following:

- ℞ Salicylic acid, 10.
Alcohol, 50.
Castor oil, 100.

M. Sig. Use locally.

A tablespoonful of this mixture is poured into the palm of the hand and rubbed into the affected part for a few minutes; the part is then covered with oiled silk or rubber, and again enveloped in several thicknesses of flannel or cotton. The effect is marked. The pain disappears in few minutes. This does not exclude the administration per os, but the drug may be given in smaller doses than usual.

If the oil of wintergreen be substituted for the salicylic acid, the effect will be still better.—*Merck's Archives.*

RHINOPHARYNGITIS IN YOUNG CHILDREN.—A simple procedure for local treatment is recommended by Gaston, viz., the introduction into the nostrils, three or four times a day, of a cotton tampon rolled to a point, covered with borated vaseline, with or without the addition of an astringent, such as the following:

- ℞ Antipyrin, gr. viij–xvj.
Acidi borici, gr. vj.
Vasellini, 3 v.

M. Ft. ungt. Sig. External use.

If the child greatly objects to the tampons, one or two drops of the following mixture should be instilled into each nostril night and morning:

- ℞ Menthol, gr. viij.
Ol. amygdalæ dulcis, 3 j.

M. Sig. External use.

If the direct treatment of the pharynx seems indicated, it may be swabbed with iodine in glycerin, equal parts.—*Doisy, Ex.*

PROLAPSUS ANI.—

- ℞ Ext. hamamelis Virg.,
Glycerit. ac. tannic, aa 3 j.

M. Sig. Apply in rectum with the little finger, or small mop, two or three times a day. (For adults or children.)—*Louisville Med. Mon.*

IN THE BEGINNING OF PULMONARY TUBERCULOSIS.—

- ℞ Hydrarg. bichlor., i.
Aq. dest., 1,000.

For subcutaneous injection in the suprascapular and infrascapular fossæ. Also useful in skin tuberculosis.—*Dubois, Med. Rec.*

FISSURE OF THE TONGUE.—

- ℞ Acid carbol., parts 1.5.
Tinct. iodi, parts 5.0.
Glycerini, parts 15.0.

M. Sig. For local application with a camel's hair brush.—*Monatsch f. Dermatol.*

SCABIES.—

- ℞ Flor. sulphur, gr. 77.1.
Potassii carbon, gr. 38.5.
Lanolini, 3 7.7.

M. Ft. ungt. Sig. For external use.—*Centralbl f. Kinderheilk.*

ACUTE RHEUMATISM.—

℞ Sodium chloride, gr. xv.
Sodium bicarbonate, 3 iss.
Acetanilid, 3 viss.

M. Sig. Give 8 to 15 grains every 3 to 6 hours, as indicated.—*Allen, Med. World.*

CHRONIC NASOPHARYNGITIS.—An issue of the *Memphis Lancet* has an article in it by Somers, of Philadelphia on this subject. He believes it best to discuss our local remedies under the divisions of pigments, ointments, powders, sprays and vapors. The value of pigments depends upon their accurate application to the area hypertrophied or the seat of the ulcer, should such be present. Under the head of pigments turpentine with oil of anise makes a valuable application, especially in acute exacerbations of the chronic affection; it may be diluted with lavender, and any of the essential oils may be used to disguise the odor, anise, as mentioned, being very agreeable to the majority of patients. This should be applied to the nasopharynx with the cotton tuft on a curved applicator several times weekly. In many cases it seems almost impossible to apply the drug on account of the irritable condition of the parts, the uvula immediately being drawn upward and backward as soon as the tongue depressor is placed in the mouth. In these cases a 1 per cent. cocaine spray will greatly facilitate the treatment, or in its place good results are obtained with a spray of five grains of menthol to the ounce of liquid cosmeline or any of the bland oils used for this purpose. A palate retractor is frequently of value, and although somewhat unhandy at first, one soon becomes able to manage it without any difficulty. White's self-retaining is the one the author uses, and he has found it very satisfactory, enabling one to apply the pigment to the proper area desired. It seems to be the custom to apply the remedy to the pharyngeal walls and vault without any evidence of the medicament reaching the part diseased; should the condition be due to ulceration of the posterior end of the middle turbinal, it is impossible in the general way of making local applications to

reach the affected parts at all, and it is best to use the rhinoscopic mirror in every case where applications are made to the nasopharyngeal region.

As a stimulating absorbent the following has been found useful in many cases:

℞ Iodine crystals, gr. 10.
Potassium iodide, gr. 20.
Menthol, gr. 50.
Glycerine, q. s. ad $\frac{3}{4}$ i.

M. Sig. For local application. Or the muco-purulent secretion may be materially diminished by:

℞ Camphor,
Carbolic acid, aa gr. 30.
Menthol, gr. 50.
Turpentine, $\frac{3}{4}$ ℥.
Albolene, q. s.

Sig. The albolene, or any suitable oil, is added a drop at a time until one drop remains free in the bottom of the bottle.

Nitrate of silver in obstinate cases is valuable if applied to limited areas, and it may be used in solutions varying in strength from ten grains to saturation. As is well known, the application of weak solutions of silver to the mucous membranes is somewhat painful, while strong solutions if carefully used cause no inconvenience; but caution should always be observed to see that there is no excess of the fluid on the applicator and that it does not touch any part but that for which it was intended. Ointments have not been used to any great extent in the nasopharynx, but they are very serviceable, as they remain for a considerable time after being applied and allow the drugs to exert a continuous action. They are applied in the same manner as pigments and various combinations may be used, the following being of service in the affection described:

℞ Ichthyol, part j.
Zinc oxide,
Wheat starch, aa parts x.
Lanolin, parts xx.

Many other combinations will readily be suggested by using pigments in this manner, and often better results are obtained with the ointments than with the latter form of medication. Powders are rarely of value, as they are apt to get into the larynx and produce violent attacks of coughing, even if the utmost care be used

in their application, and at the same time a great objection is that it is impossible to apply them solely to the parts desired, as they cover the entire region and more or less obstruct the already diminished respiratory area. Of far more value and utility are the sprays, always being used before other local applications to remove mucus, etc., and they are serviceable to the patient as being readily used at home. With a coarse or fine spray we may apply any drug in solution that seems best suited to the individual case; the alkaline antiseptic spray or wash, depending on the method with which it is used, and known as "Seiler's," being representative in its class. Sprays may be used to cleanse the parts, as the one just mentioned, or as antiseptics, astringents, and sedatives, hamamelis representing the last class.

Vapors or nebulæ are generally used as inhalations for the various forms of laryngeal inflammation, but occupy a distinct and valuable place in the therapy of the affection described in this paper. Their value lies in the penetrating power they possess, the medicated vapor penetrating the recesses of the nasopharyngeal region, and, when an oily base is used, remaining in contact with the tissues for some time after being inhaled. Nebulæ may be used either with or without the addition of steam, the choice depending upon the result desired, and when the mucus is tenacious and clings to the vault of the pharynx, especially at the orifice of the Eustachian tube and adjoining fossæ, we find an alkaline steam vapor will readily cause the separation of the adherent secretions from the mucous membranes, and for this purpose the following will be found useful:

℞ Sodii bicarb.,
Sodii biborate, aa gr. x.
Potass. bromide, gr. v.
Aq. mentha pip., 3 ij.
Aq. dest., q. s. ad 3 j.

M. Sig. Use twice daily.

Inhalations may be used at any time during the day, provided steam is not mixed with them; should hot vapors be desired, the patient must not go into the air for at least one hour afterward, as the mucous mem-

brane becomes relaxed and coryza almost invariably results. It is the best plan to use inhalations at the room temperature during the day and then direct the patient to steam the nasopharynx for five minutes just before retiring for the night; in this way all danger of coryza or of acute exacerbation of the catarrh will be avoided, and after this has been repeated a few times there will be no difficulty in removing the tenacious mucus. The following formula may be used at night as a stimulant; it acts by increasing glandular secretion and stimulating the parts to normal activity:

℞ Ammor. chlor., gr. xv.

Tinct. benzoin comp., 3 j.

M. Sig. One-half teaspoonful in four ounces of boiling water.

There are a number of satisfactory devices to use vapors that are very useful in office work, while the patient may obtain a vaporizer especially made for this purpose, or the solution desired may be placed in a cup filled with boiling water; over this an ordinary funnel is inverted and the medicated steam may readily be inhaled. It is essential to see that the patient allows the vapor to pass through the nasopharynx and out through the nose. Although this is usually more difficult to learn than the usual forms of laryngeal inhalations, still no trouble should be experienced on this point.—*Gail-
lard's Med. Jour.*

EPILEPSY.—

℞ Potassi iodidi, 3 i.

Potassii bromidi, 3 2.

Ammonii bromidi, 3 2 1/2.

Potassi bicarbonatis, gr. 40.

Infus. calumbæ, q. s. ad 3 6.

M. Sig. A teaspoonful before each meal, and three teaspoonfuls at bed-time with a little water.—*Brown-
Seward, Med. Rec.*

GOOD ADVICE.—If you are about to examine a septic case or one where you suspect syphilis, wash your hands in vinegar or dilute acetic acid, and you will soon discover, by the smarting, any little scratches or abrasions in your skin which might become the starting points of infection.—*Louisville Med.
Mon.*

BRONCHITIS.—

- ℞ Ammon. muriat., 3 j.
 Syr. senegæ, fl. ʒ ss.
 Tinct. opii camphorat., fl. 3 j.
 Syr. tolutan, fl. ʒ ss.
 Aq. gaultheriæ, q. s. ad fl. ʒ ij.

M. Sig. Teaspoonful every two hours.—*Rex*.

- ℞ Morph. bimeconatis, gr. j.
 Ammon. muriatis, ʒ j.
 Aq. camphoræ, fl. ʒ iss.
 Aq., q. s. ad fl. ʒ iij.

M. Sig. One teaspoonful as required.—*Jour. of Resp. Organs*.

- ℞ Liq. ammon. acetat., fl. ʒ ss.
 Syr. ipecac, fl. 3 j.
 Liq. morphinæ sulph. (U. S. P.)
m 40.
 Syr. acaciæ, fl. ʒ j.
 Aq., fl. ʒ iss.

M. Sig. Teaspoonful every two hours for a child of two years.—*Meigs and Pepper, Dominion Med. Mon.*

CLUB FOOT.—Speaking of the time to begin the treatment of club foot, A. M. Phelps, M. D., says: I would say as soon as you have delivered the placenta, and you have assured yourself that the mother is in no danger of post-partum hemorrhage, begin the treatment.—*Louisville Med. Mon.*

HYPODERMIC SOLUTIONS.—

- ℞ Creosote pure, grm. 1.
 Aseptic olive oil, grm. 14.
 ℞ Iodol or iodoform, grm. 1.
 Olive oil, grm. 29.
 ℞ Crystals of phenic acid, grm. 1.
 Olive oil, or aq. with a little alcohol, grm. 49.
 ℞ Neutral hydrochlorate of quinine, grm. 1.
 Aq. dest. and bull., grm. 9.
 ℞ Antipyrin, grm. 1.
 Aq. dest., grm. 10.
 ℞ Ichthyol, grm. 10–20.
 Aq. dest., grm. 100.
 ℞ Sod. arsenit., gr. 1.
 Aq. dest.

Dose. Two or three drops.—*Med. Rec.*

TREATMENT OF BURNS WITH CHLORATE OF POTASSIUM.—Lutaud (*Journal de médecine de Paris*) advocates the following method: The vesicles are first opened and poultices applied every four hours to the af-

fected part until the epidermal laminæ are entirely detached. A pledget of absorbent cotton soaked in a saturated solution of chlorate of potassium is next applied and covered with a layer of oil silk. A small quantity of glycerin may be added to the chlorate of potassium solution to prevent the cotton from sticking to the wound, or, better still, the salt may be made into an ointment with lard. Déclat's "glyco-phenique" he considers perhaps better than pure glycerin, owing to the markedly sedative action of the acid on burns.—*N. Y. Med. Jour.*

A SPECIFIC FOR RHUS POISONING.—A specific for rhus poisoning by coming in contact with the oak:

- ℞ Spir. tinct. aconite, 3 j.
 Muriate ammonia, 3 ij.
 Aq. dest., q. s. ad ʒ vj.

M. Sig. Apply locally three or four times daily, then internally.

- ℞ Rhus tox, gtt. x.
 Apis, gtt. vij.
 Aq., q. s. ad ʒ iv.

M. Sig. Teaspoonful every four hours.—*Louisville Med. Mon.*

STROPHANTHINE.—From a clinical study of the use of strophanthine in cardiac and other cases, Stahr (*Therap. Monatsch, in Journal of Treatment*) comes to the conclusion that Merck's crystalline strophanthine per os is not a very powerful poison, and can be given with impunity up to 20 mg. per diem. (1) That in doses above 15 mg. it increases diuresis; (2) that it is not cumulative; (3) it has no untoward action, and (4) patients notice that the attacks of palpitation of the heart lessen—but he is undecided as to whether it is merely due to the rest in bed.—*Dunglison's College and Clinical Record*.

PHTHISIS IN CHILDREN (EPHEMERIS):

- ℞ Beechwood creasote, grm.
 3.00–8.
 Ol. gaultheriæ, grm. 0.60.
 Pulv. acaciæ, grm. 3.00.
 Glycerini, grm. 15.00.
 Ol. morrhux, q. s. ad grm.
 175.00.

M. Sig. One teaspoonful one hour after each meal.—*Dunglison's College and Clinical Record*.

APHTHÆ.—

℞ Potassi choricæ, 3 i.
Tinct. myrrhi, gr. 46.2.
Aq., q. s. ad 3 6.6.

M. Sig. For rinsing the mouth.
In intractable and very painful cases the mouth may be painted with the following solution:

℞ Acidi salicylici, gr. 30.8.
Spiriti, 3 2.5.
Glycerini, 3 5.1.

Or:

℞ Hydrargri bichloridi, gr. 1.5.
Aq. dest., 3 3.2.

Louisville Med. Mon.

GONORRHOÆAL EPIDIDYMITIS.—Long (*Boston Med. and Surg. Jour.*) recommends the application twice a day, on the inflamed organ, of petrolated guaiacol—10:100. The efficacy of the application is in direct proportion to the intensity of the inflammation. To further the absorption of the exudate, replace the guaiacol with belladonna ointment. *Dunglison's College and Clinical Record.*

URIC ACID DIATHESIS.—For uric acid diathesis the following mixture is recommended by Golding Bird, M. D., (*Medical News*):

℞ Sodii bicarbonatis, gr. 45.
Ac. benzoici, gr. 15.
Sodii phosphatis, gr. 80.
Aq. bull., 3 1½.

M. Dissolve and add:
Aq. cinnamomi, 3 3.

Sig. Two teaspoonfuls t. i. d.—*Med. Fortnightly.*

URETHRAL FEVER.—Five drops of oil of wintergreen six hours before and again immediately after a sound is passed will often prevent this trouble. Copious draughts of water should also be given to dilute the urine.—*Louisville Med. Mon.*

CEREBRAL APOPLEXY.—

℞ Ergotini, 0.05.
Acidi lactici, 10.
Aq. sterilis., q. s. ad 100.

M. Sig. Inject one or two syringe-fuls.—*Huchard, Med. Rec.*

DIGITALIS IN HEART DISEASE.—Research would seem to prove that the prolonged use of digitalis is capable of producing cardiac hypertrophy in

the normal heart, and if this is the case, it is fair to assume that when the drug is given to a man suffering with valvular disease with deficient compensation, it must aid materially in inducing compensatory hypertrophy, in addition to any immediate stimulant action which it may exercise in the circulatory apparatus.—*Hare, Ex.*

RESORCIN IN THE TREATMENT OF GRANULAR PHARYNGITIS.—Lyon (cited in the *Gazetta degli ospedali e delle cliniche*) employs the following gargle in the acute stage:

℞ Resorcin, parts 4.
Glycerin, parts 15.
Aq. dest., parts 150.

M.—*N. Y. Med. Jour.*

BLEEDING MUCOUS SURFACES (EPISTAXIS).—Rendu (*Buffalo Med. Jour.*) recommends the following:

℞ Antipyrin, grm. 0.50.
Tannin, grm. 1.00.
Powd. sugar, grm. 10.00.

M. Sig. Dust a little on bleeding surface several times a day.—*Dunglison's College and Clinical Record.*

PATHOGNOMIC SIGN OF MENINGITIS. Netter, at a recent meeting of the Société Médicale de Paris, affirmed Kering's sign to be a pathognomic sign of meningitis. The sign consists of inability to extend the leg when in the sitting posture, while in the recumbent posture no such difficulty is manifest. No other disease shows this so far inexplicable sign.—*Louisville Med. Mon.*

UREMIA.—

℞ Ext. pilocarpi, alc.,
Ext. scillæ,
Resin. jalapæ,
Resin. scammonii, aa gr. xv.

M. et ft. pil. No. xx. Four or five pills daily during as many days.—*Prac. Med.*

TRISMUS NEONATORUM.—

℞ Tinct. opii, m j.
Ol. ricini, fl. 3 j.

M. Sig. A teaspoonful every four hours, with a warm bath.—*Druitt.*

℞ Chloral hydrat., gr. i-iv.
Syr. simp., fl. 3 j.

M. Sig. One dose.—*Bartholow, Ex.*

URTICARIA. — According to the *Louisville Journal of Surgery and Medicine*, Rotch recommends:

- R Powd. calamine, 3 ij.
 Limewater, 3 viij.
 Carbolic acid, 3 ss.

M. Use as a lotion. If not sufficient to allay irritation and the burning is extreme, the following ointment is advised:

- R Menthol, gr. x.
 Lard, 3 j.
 M.—*N. Y. Med. Jour.*

ASTRINGENT APPLICATION FOR THE VAGINAL MUCOUS MEMBRANE.—The *Journal de médecine de Paris* recommends the following for a relaxed condition of the vaginal mucous membrane:

- R White vaseline, gr. 450.
 Ext. of rhatany, gr. 60.
 Tinct. of roses,
 Tinct. of vanilla, aa gtt. 75.
 Tinct. capsicum, gtt. 7.
 M.—*N. Y. Med. Jour.*

SPECIFIC URETHRITIS.—Where there is a lack of tone in the canal Dr. J. C. Taylor has obtained good results from a solution, each quart of which contains:

- R Ext. hydrastis, gr. j.
 Acid tannic, gr. ij.
 Zinc sulphate, gr. viij.
 Alumen,
 Acid boric, aa gr. viij.

Doubling the strength, if necessary.—*Cleve. Jour. of Med.*

HYDROCHLORIC ACID IN SCIATICA.—Hydrochloric acid applied over the course of the sciatic nerve or to the heels and feet, for the relief of pain in these parts in twenty-six cases. Sixteen had sciatica, which in most instances had defied every other treatment. Of these, two were completely cured, eleven were considerably relieved, and three were not improved. The remaining patients were suffering from intractable pain in the heels and plantar region, the sequelæ of acute rheumatism, many gonorrheal. Of these, four were quite cured, one was very much relieved, and five were not improved. The average number of applications was for all the cases fifteen. The strong acid of the British Pharmacopœia was painted on the skin at bed-

time with a glass brush, in a series of lines about two or three inches long over the tender spots in the thigh and calf. When dry, the limb was enveloped in cotton-wool loosely bandaged, and so left till the morning, when the patient was allowed to get up as usual. The acid may be applied every night on the skin, but it should be discontinued directly if there is any sign of redness or irritation of the parts.—*Bayliss, British Medical Journal, Monthly Cyclopedia of Practical Medicine.*

TURPENTINE EMULSION.—

- R Ol. turpentine, 3 ss.
 Powd. acacia, 3 ij.
 Cinnamon aq., q. s. ad 3 iv.

Place the powdered acacia in a mortar; put the oil of turpentine in a graduate, and three drachms of the cinnamon water in another graduate; pour the oil and water on the powdered acacia, rub thoroughly, add the remainder of the water, and strain.—*Bulletin of Pharmacy.*

ENURESIS NOCTURNA.—

- R Tinct. rhuris aromatici, 3 3.8.
 Atropæ sulphatis, gr. 4.
 Tinct. ergotæ 3 i.3.

M. Sig. At night before retiring, five to ten, to fifteen, to twenty drops to be given in water (closely watch the pupils and difficult deglutition).—*Louisville Med. Mon.*

ACUTE TONSILLITIS.—

- R Opii deod., gr. ʒv.
 Tinct. verat. virid., m ¼.
 Hydrarg. chlor. mitis., gr. ʒv.
 Sacchari lact., q. s.
 Ol. anisi, m ʒv.

M. et ft. tabella No. 1. Sig. One tablet every hour for adults.—*Newcomb, Med. Rec.*

INTERTRIGO.—

- R Acidi borici, gr. 3.8.
 Lanolini, 3 6.4.
 Vaselini, gr. 77.1.

M. Ft. ungt. Sig. External use. *Louisville Med. Mon.*

SEMINAL EMISSIONS.—

- R Potassium bromide,
 Muriated tinct. iron, aa 3 j.
 Dest. aq., 3 iiij.

One to two teaspoonfuls after each meal.—*Med. Age.*

PSORIASIS.—The following has been proposed for psoriasis in a child 12 years:

1. Frictions each morning with black soap.
2. Warm alkaline baths afterwards.
3. Light application by means of absorbent cotton of the following salve every 48 hours:

R Chrysophanic acid, gr. 2.

Starch-flour, gr. 10.

White petrolatum, gr. 90.

4. Afterward a lotion and powder especially at night with glycerole of starch.

5. Thermal season at Saint-Christian or Mont-Dore.

6. If the child is very young glycerole of cade.—*Merck's Arch.*

ACUTE CYSTITIS.—

R Belladon. succi., gtt. xx.

Sodii boratis, 3 ij.

Acid benzoic, gtt. xx.

Tinct. opii camph., 3 iss.

Ol. gaulther., gtt. xij.

Syr. simp., 3 ij.

Aq. dest., 3 iv.

M. Sig. Two drams in water four times a day.—*Louisville Med. Mon.*

LEAD COLIC.—Deléarde, Lille, France, treated five sick with lead colic by injecting 500 c. c. of physiologic salt solution under the skin of the abdomen; in all the cases, muscular pain soon disappeared; after twenty-four hours, instead of the constipation, a beneficial diarrhoea set in, lasting two or three days, when it ceased.—*Louisville Med. Mon.*

AN IRRIGATION FOR THE ACUTE ANGINA OF CHILDREN.—The *Riforma medica* credits the following formula to Marfan:

R Crystallized carbolic acid, gr. 10½.

Ol. of thyme, gtt. 3.

Glycerin, gr. 450.

Aq., gr. 1,500.

M.—*N. Y. Med. Jour.*

TINCTURE OF CHLORIDE OF IRON.—Tincture of chloride of iron is not fit for use until at least six months old, and much better still if one year old—so say E. R. Squibb & Sons, *Semi-Annual Price List*. An important

part of its therapeutic value depends upon ethers that are slowly generated; and the sensible properties of an old, as compared with a recently made tincture are very markedly evident upon examination. The older formula for its manufacture of the U. S. P., 1870, is therefore adhered to by this firm, and the tincture is allowed to stand one year before using.—*The Va. Med. Semi-Mon.*

REMEDY FOR RIGID PERINEUM.—In rigid perineum Dr. Southworth says that "he who tries the following will never be without it. I consider it indispensable and infallible:

R Chloroform, 3 ij.

Ether sulphuricum,

Cologne spir., aa 3 j.

M. Sig. Apply locally."

He further says: "It acts quickly and well. I have had large heads pass perineums which seem impossible without extensive rupture, without the beginning of a tear even, when this preparation was used."—*The Med. Times.*

BLEEDING GUMS.—After the extraction of teeth Vian recommends the following as an efficient styptic to check the bleeding:

R Chloroformi, 3 j.

Acid tannic,

Menthol, aa 3 ss.

Tinct. kramæ, 3 j.

Aq. dest., q. s. ad Oj.

Louisville Med. Mon.

TO CURE ITCH IN TWO HOURS.—

R Sulphur, 3 ij.

Quicklime, 3 vj.

Aq., O ij.

Boil till combined, then allow to cool and settle; decant and keep hermetically sealed.

Sig. Rub with soft soap for half hour, then take tepid bath for half hour. Then apply solution and leave on for quarter hour, then take bath. *Med. Age, Cincinnati Lancet-Clinic.*

RHEUMATISM.—

R Sodium salicylate, gr. 90-120.

Syr. of bitter orange peel,

Aq. dest., aa 3 2.

Curaçoa, 3 i.

M. Sig. This amount to be taken in the twenty-four hours in carbonated water.—*Bricemoret, Med. Rec.*

A GARGLE FOR LACUNAR AMYGDALITIS.—The *Journal de médecine de Paris* credits the following formula to Moure:

- ℞ Borax,
Potassium bromide, aa parts 5.
Carbolic acid, part 1.
Glycerin, parts 50.
Infusion of althæa, parts 450.
M.—*N. Y. Med. Jour.*

COCAINE POISONING.—The *Riforma medica* attributes the following to Huetlin:

- ℞ Nitrite of amyl,
Spir. of wine, aa equal parts.
To be used by inhalation.

[We should advise great caution in the use of this remedy, only four or five drops being used at first, and the condition carefully watched.]—*N. Y. Med. Jour.*

ARTICULAR RHEUMATISM.—

- ℞ Ichthyol, 3 xx.
Glycerin, fl. 3 viij.
Aq., fl. 3 xxx.

Place on painful joints, cover with an impervious fabric, and keep hot for some hours. A bag of hot sand may be laid outside, and the application may be employed every evening.—*Phil. Poly.*

ACUTE BRONCHITIS.—

- ℞ Ammonium carb., gr. xxx.
Tinct. hyoscyamus, fl. 3 iv.
Codeine, gr. ij.
Syr. wild cherry, fl. 3 iv.
Aq. camphor, q. s. ad fl. 3 iv.

M. Sig. Teaspoonful every two hours.—*Hersvirsch, Phila. Poly.*

ZINC CHLORIDE IN CHRONIC METRITIS.—Delbet declares that zinc chloride is far superior to the curette, which has superseded it, in chronic metritis. It never aggravates inflammation of the appendages as the curette does. It does not necessitate the taking of an anesthetic and confinement to bed, as the patient, he says, can go about with impunity after its use. A 20-per-cent. solution, he finds by experience to be the best. If stronger or weaker, it does not answer as well. About a drachm is injected into the uterine cavity, and the vagina at the same time is irrigated with a boric solution or water sterilized by boiling, after which a

tampon is applied. At least three injections are needed, using them at first every two or three days and later once a week to once a fortnight. The action of the solution is no more destructive to the tissue than the curette. To use the zinc chloride as a crayon is objectionable, as atresia of the cervix has frequently followed in consequence. None of the patients on whom Delbet has used this treatment has since become pregnant.—*Merck's Arch.*

TAPEWORM.—

- ℞ Ol. tigllii, gtt. j.
Chloroformi, gtt. xxx.
Glycerini, 3 j.

M. Sig. Give at night on an empty stomach; on the following morning give a dose of castor oil.—*Med. Rec.*

SYPHILITIC CORYZA IN THE NEW-BORN.—The following formula is given in *Nord Médical*:

- ℞ Calomel, part j.
Vaseline,
Lanoline, aa parts v.

M. For swabbing the nasal passages.—*Med. Rev. of Revs.*

APHONIA AND HOARSENESS.—

- ℞ Potass. bichromate, gr. $\frac{1}{16}$.
Take a dose this size every hour.

This remedy will be found speedily efficacious in hoarseness due to excessive action of the vocal cords or resulting from an acute cold.—*Med. Standard.*

LABOR PAINS.—

- ℞ Ext. viburn. prunifol. fl.,
Ext. hydrast. canadens fl., aa xv.

M. Sig. Twenty drops in hot drinks every two hours.—*Pinard, Jour. de Méd. de Paris.*

LINIMENT FOR COUNTER-IRRITATION IN CHEST AFFECTIONS:

- ℞ Vinegar canthar., fl. 3 ij.
Spir. camphor, fl. 3 iij.

Liniment for application to the chest at night.—*Guyon, Med. News.*

THREAD WORMS.—A. Monti, M. D., recommends the following:

- ℞ Senna,
Tansy, aa 3 3.
Aq., q. s. ad fl. 3 $\frac{3}{4}$.

Med. Bull.

BILIOUSNESS.—

- ℞ Fellis bovini purif., 3 j.
Manganessii sulph. exsicc., 3 ij.
Resinæ podophylli, gr. v.
M. et ft. pil. No. xx. Sig. One pill three times a day.—*Dacosta*.
℞ Ext. colocynth comp., gr. iiss.
Podophyllin, gr. ¼.
M. et ft. pil. No. i.
℞ Acid. nitro-muriat. dil., fl. 3 ij.
Sig. Ten or fifteen drops well diluted, before each meal.—*Bartholow*.
℞ Ammon. Chlor., 3 iij.
Aq. menthæ pip., fl. 3 iij.
M. Sig. Tablespoonful three times a day.—*Starr, Dominion Med. Mon.*

TO REMOVE A FOREIGN BODY FROM UNDER THE NAIL.—Alternately soften the nail with the end of a match dipped in caustic potash and scrape with a piece of glass until the object is reached.—*Jour. of the Am. Med. Ass.*

WHOOPING-COUGH.—

- ℞ Tinct. belladonnæ, 3 ij.
Phenacetin, 3 iij.
Spir. frumenti, (q. s. solve phenacetin) 3 j.
Fl. ext. castaneæ, 3 vj.
M. Sig. Teaspoonful every three hours until the face flushes; then every three, four, or six hours, as needed to control the cough, in a child of six years.—*Lancaster, Florida Health Notes*.

CHLORAL IN THE TREATMENT OF UTERINE SPASMS.—The *Quebec Revue médicale* ascribes the following formula to Spondly:

- ℞ Dest. aq. parts 200.
Syr., parts 50.
Chloral hydrate, parts 4.
M. Sig. A tablespoonful every two hours.—*N. Y. Med. Jour.*

THE TOXIC EFFECTS OF BORIC ACID. Evans (*British Medical Journal*) reports a case in which, after about three weeks' use of boric acid in increasing doses of from ten to twenty grains three times a day, for cystitis, an erythematous rash appeared on the neck, face and head, and was followed by some subcutaneous œdema and a fine scaly dermatitis. The salivary glands began to enlarge and subsequently the man became per-

fectly bald. It was six weeks before there was any new growth of hair. The author has observed the milder of these effects in a number of other cases, but has always been able to prevent baldness by stopping the administration of the drug.—*N. Y. Med. Jour.*

BITES AND STINGS OF INSECTS.—

- ℞ Spir. ammon. aromat., fl. 3 ij.
Sig. Apply to wound freely. Indication: Depression, if present, to be overcome by stimulants.
℞ Liq. plumbisubacetatis,
Tinct. opii, aa fl. 3 ss.
Aq. dest., q. s. ad fl. 3 viij.
M. Sig. Keep applied to inflamed area on soft cloth saturated with lotion. Indication: To be employed after neutralizing the poison with aromatic spirit of ammonia.
℞ Pulv. ipecac, 3 ss.
Spir. vini rec.,
Ether sulph., aa fl. 3 ss.
M. Sig. Apply to bite.—*Neal, Dominion Med. Mon.*

A NEW POWDER FOR ACUTE CORYZA. The patient is first advised to wash or spray the nose with a lukewarm alkaline solution (such as Seiler's), so as to rid the chambers of excessive mucus. About three grains of the following combination is then sniffed up into each nostril two or three times daily:

- ℞ Soda bicarb.,
Soda biborat., aa gr. xv.
Amyli, gr. v.
Acacia, 3 j.
Nosophen, q. s. ad 3 j.
M. Sig. As a snuff.—*Theisen, Med. Summary*.

VOMITING FOLLOWING IN THE COURSE OF INTESTINAL AFFECTIONS.—

- ℞ Menthol, cgm. 0.50.
Cognac, gm. 40.
Tinct. of opium, gm. 10.
M. Sig. Take twenty drops several times daily.—*Peck, Ex.*

FETID RHINITIS.—

- ℞ Salol, 3 j.
Boracic acid, 3 ss.
Salicylic acid, gr. viij.
Thymol, gr. iij.
Talcum, to make 3 ij.
To be sniffed up night and morning.—*Seifert, Med. Record*.

BRUISES.—

R Ammonii chloridi, 3 i-℥j.
Alcohol, fl. ʒ xvj.

M. Sig. (Evaporating lotion.) A clean piece of linen is to be spread over the injured part and kept wet with the lotion.

R Spir. camphoræ, fl. ʒ j.
Tinct. arnicæ, fl. ʒ ij.
Ext. hamamelidis dest., q. s. ad fl. ʒ xvj.

M. Sig. A clean piece of linen to be spread over the seat of injury and kept wet with the lotion.

R Tinct. aconiti rad.,
Tinct. opii,
Chloroform, aa fl. ʒ ij.

M. Sig. Shake well before using. (Poison.)—*Whelpley*.

R Tinct. capsici,
Tinct. myrrh,
Tinct. opium, aa fl. ʒ ij.
Tinct. gualac., fl. ʒ j.
Spir. camphor, fl. ʒ ij.

M. Sig. Use locally.—*Dominion Med. Mon.*

BUBO.—

R Argenti nitratis, gr. xv.
Aq. dest., fl. ʒ ij.

M. Sig. Apply freely with camel's-hair brush. Indication: Use in early stages to abort.

R Aluminis acetatis, ʒ ij.
Aq., q. s. ad fl. ʒ viij.

M. Sig. Apply on cotton saturated with lotion. Indication: Used to abort in early stage.—*Dominion Med. Mon.*

CARRON-OIL FOR SPECIFIC URETHRITIS.—W. E. Wamsley, of Brooklyn, at the suggestion of a patient, has tried linimentum calcis as an injection in gonorrhea and gleet with unusually good results. He had used it for a burn and it occurred to the patient that it might be good in gonorrhea, so he asked the doctor's opinion about it. The doctor at first paid no attention to the suggestion, but later it occurred to him that he might give it a trial. He has since used it in 27 cases of acute specific urethritis after a three days' treatment with compound copaiba mixture of the National Formulary, using it four times a day, and every case was cured in three or four days. In nine cases of gleet a complete cure was accomplished in from seven to nine days

with the carron-oil injections only. The author warns against the danger of this emulsion becoming rancid if kept long and advises that it be only used when freshly prepared.—*Merck's Archives*.

ANÆMIA.—After correcting digestive derangements and constipation by a ten day's course, begin with one of the milder preparations of iron; subsequently a modified Bland pill may be given.

R Ferri sulph. exsicc., gr. 72.
Potass. carbonat., gr. 12.
Pulv. nucis vomicæ, gr. 24.
Saponis, gr. 6.

M. et div. in pil. xxiv; coated. Sig. One to three after each meal.

Some prefer the insoluble preparations given immediately or about one hour after food, so that they may be dissolved by the gastric juice and so absorbed with the food. Where there is intolerance of iron preparations, this is a good plan.—*Yeo, Med. Rec.*

AMYGDALITIS AND NON-DIPHTHERITIC ANGINAS.—

R Salol, gm. 2.
Ol. amygdalæ dulcis, c. c. 4.
Syr. simplicis, c. c. 30.
Aq. dest., c. c. 75.

Sig. To be taken in three doses during the day.—*Ephemeris, Med. Rec.*

ACUTE PHARYNGITIS.—

R Potass. chlorate, gr. xv.
Ol. peppermint, gtt. ij.
Ext. krameria, gr. xv.
Ext. glycyrrhiza, ʒ iiss.

Divide into 30 troches.

Or:

R Ammon. chloride, gr. xxx.
Powd. ipecac, gr. ij.
Powd. capsicum, gr. ss.
Ext. glycyrrhiza, ʒ xx.

Divide into 30 troches. One every two hours.—*Lefferts, Med. Rec.*

VAGINITIS.—

R Pulv. alum,
Zinc sulphate,
Borax,
Carbolic acid, aa 16.
Aq., 100.

M. Sig. A tablespoonful to a quart of lukewarm water as a vaginal injection twice daily.—*Louisville Med. Mon.*

INFLAMED TONSILS.—

℞ Apomorphine hydrochlor., gr. iss.

Codeine sulph., gr. iv.

Syr. wild cherry, fl. ℥ iij.

Dose. One teaspoonful every three hours.—*Hersvirsch, Philadelphia Polyclinic.*

AMAUROSIS AND AMBLYOPIA.—

℞ Potassii iodidi,
Pepsini (scale), aa 3 ij.
Aq., q. s. ad fl. ℥ iij.

M. Sig. Teaspoonful in water after meals, and increase. *Indications:* For amaurosis and amblyopia due to syphilis or metallic poisons.

℞ Pilocarpinæ hydrochloratis, gr. j.

Sacchari lactis, 3 iss.

Alcohol, q. s.

M. et ft. tabellæ triturationes No. 10. Sig. One tablet every three hours. *Indications:* Used in uremic and rheumatic amaurosis and amblyopia.

℞ Strychninæ sulphatis, gr. iij.

Sacchari lactis, 3 iiss.

Alcohol, q. s.

M. et ft. tabellæ triturationes No. 100. Sig. One tablet three times a day and increase until mild physiological effects of strychnine are induced. *Indications:* Of value in physiological, tobacco and alcoholic amaurosis and amblyopia, and in conjunction with potassium iodide in cases resulting from chronic metallic poisons.—*Dominion Med. Mon.*

LOCOMOTOR ATAXIA.—

℞ Ferri lactatis, ℥ ii-iv.

Ext. cinchonæ, 3 i-℥ iv.

Ext. nucis vomicæ, gr. v-xv.

Ext. gentianæ, q. s.

M. ft. pil. 40. Sig. One or two as a tonic after three meals daily.—*Erb, Med. Rec.*

DISORDERS OF PUBERTY.—The entrance upon her reproductive period of life in woman is almost invariably accompanied by a certain amount of disturbance of the general health; its cessation is not rarely, if not usually, accompanied by a certain amount of erotic excitement, a period of active recrudescence of the generative instinct. Both periods commonly produce such disturbances as necessitate the calling in of medical

aid. The first change, or puberty, is frequently accomplished under the circumstances of rapid growth; and the double tax upon the system produces in many cases a distinct debility, which may lead ultimately to tuberculosis or other wasting disease. Commonly there are recurring periods of lassitude, weight, and sense of dragging in each groin, before the menstrual flow is actually established. Under these circumstances it is advisable to counsel the patient to sit over a vessel containing hot water, or, if that be not sufficient, to stay in bed and have warm cloths applied to the vulva; the last is a powerful means of exciting a flow from the genitals, and is useful not only at puberty, but at other times when the catamenia have been checked, as by cold; and it is especially useful in any arrest of the lochia. (In the last case the application of hot cloths without delay, on the arrest of the lochial discharge will often avert a grave condition.) If these measures are insufficient, it is usual to give iron with aloes.—*Fothergill, Med. Rec.*

TO DISINFECT THE SKIN.—To disinfect the skin before inserting the needle and for cleansing the operator's hands:

℞ Lysol, 2.

Aq., 100.

Med. Rec.

TREATMENT OF WOUNDS BY STEAM. Beyer, observing the satisfactory results which follow the use of steam as a disinfectant for surgical dressings, has applied it to granulating wounds, abscesses, etc., to facilitate cicatrization, directing upon them, at a distance of twenty inches, a jet of steam at a temperature of 127° F. The results were most favorable, and ulcerations which were resistant to treatment rapidly healed under the influence of steam.—*N. Y. Medical Times.*

IRRITABLE BLADDER AFTER CONFINEMENT.—

℞ Salol,

Tinct. hyoscyami, aa 3 ij.

Infus. buchu., q. s. ad ℥ vj.

M. Sig. Tablespoonful three times a day.—*Fothergill, Med. Rec.*

VOMITING.—In obstinate cases of vomiting after surgical operations, try the popular prescription:

℞ Spir. chloroformi, *m* viij.
Aceti. opii, *m* iij.
Mucilag. acaciæ,
Aq., q. s. ad 3 j.

M. Sig. Repeat every hour.

Or:

℞ Hydrarg. chlor. mit., gr. $\frac{1}{16}$.
Cerii oxaltis, gr. ij.
Codeinæ sulphatis, gr. $\frac{1}{4}$.

M. et ft. chart. Sig. Give at intervals of half an hour until four or five powders have been administered.—*Rhoads, Med. Rec.*

FORMULA FOR MILK MODIFICATION IN THE HOME.—Westcott (*Archives of Pediatrics, Medical Times*) believes that a mixture of cream and whole milk is more reliable than a mixture of cream and under milk, and gives the following formula:

Cream (12 per cent.), $\frac{3}{4}$ 7, 3 2.
Whole milk, $\frac{3}{4}$ 8, 3 1.
Limewater, $\frac{3}{4}$ 2.
Sugar of milk (dry), $\frac{3}{4}$ 1 $\frac{3}{4}$.
Aq., $\frac{3}{4}$ 22, 3 5.

This formula gives 40 ounces of a mixture containing 3 per cent. of fat, 6 per cent. of sugar, and 1 $\frac{1}{2}$ per cent. of proteid. The advantage of this formula is that the fat and proteid may be gradually increased or diminished without frequent changing of the whole formula. To do this it is simply necessary to alter the amount of milk and cream in the mixture.—*N. Y. Med. Jour.*

FETID BREATH.—

℞ Sodii bicarbonat.,
Saccharin,
Acid salicylic, aa 3 j.
Alcoholis, $\frac{3}{4}$ vj.

M. Sig. A tablespoonful in a glass of water to rinse the mouth.

℞ Sodii biborat., gr. xv.
Thymol, gr. viiss.
Aq., fl. $\frac{3}{4}$ viij.

M. Sig. Mouth wash.—*Dominion Med. Mon.*

A NEW METHOD OF CONTROLLING POST-PARTUM HÆMORRHAGE.—Dr. Arendt calls attention to a new method of controlling post-partum hemorrhage. He seizes the cervix with a bullet or volsellum forceps and draws it down to the vulva. This

kinks the afferent vessels, and so stops or lessens the flow of blood through them. Uterine action is excited by alternate traction and relaxation. He believes that tamponing of the uterus is effective mainly because of the incidental pulling down of the uterus.—*Therapeut. Monats.*

A MIXTURE FOR CORYZA.—According to the *Riforma medica*, Malbec recommends:

℞ Ext. of hyoscyamus, gr. 2 $\frac{1}{4}$.
Iodide of potassium,
Bicarbonate of potassium, aa
gr. 30.
Ext. of licorice, gr. 75.
Aq. anise, gr. 1,800.

M. Sig. A teaspoonful every four hours.—*N. Y. Med. Jour.*

SEPTIC CONDITIONS OF THE MOUTH AND PHARYNX.—Dr. Vansant (*Philadelphia Polyclinic*) has found the following gargle to be efficient in septic conditions of the mouth and pharynx. Cases of follicular tonsillitis are especially benefited by its use:—

℞ Sodium salicylate, 3 ij.
Potassium chlorate, 3 iv.

M. Sig. Add to a pint of hot water and use as a gargle.—*Ex.*

ACUTE RHEUMATISM.—

℞ Salicylic acid, gr. xv.
Ammonium citrate, gr. xxx.
Syrup, fl. $\frac{3}{4}$ j.
Aq. dest., to make fl. $\frac{3}{4}$ iv.

A single dose.—*Dunglison, Merck's Archives.*

URTICA DIOICA AS A HÆMOSTATIC.—Roth (*Archiv der Pharmacie, Journal de médecine de Paris*) recommends a tincture of the stems, leaves and flowers of the stinging nettle (*Urtica dioica*), gathered in the spring, as an application to hæmorrhagic surfaces in cases in which there is no lesion of a large blood vessel.—*N. Y. Med. Jour.*

COCAINE ANESTHESIA.—In order to counteract the depressing effect of cocaine on the heart, sparteine is added for its tonic action. The following combination is recommended:

℞ Hydrochloride of cocaine, gr. $\frac{1}{4}$.
Sulphate of sparteine, gr. $\frac{3}{4}$.
Scheppegrell, N. Y. Med. Jour.

SNAKE BITES.—

℞ Potassii permanganatis, gr. xxiv.

Aq. dest., fl. ʒ iij.

M. Sig. With hypodermic syringe inject around and into wound freely.

Indications: If upon limb cut off circulation with ligature; if upon body excise or cauterize with hot iron. Whisky sufficient to overcome depressing effect of poison should be administered.

℞ Tinct. iodi, fl. ʒ iv.

Sig. Excise wound and swab out freely.

℞ Aq. ammoniæ, fl. ʒ ss.

Aq., fl. ʒ ij.

M. Sig. Inject into vein of leg.

Indication: To be employed only in urgent cases, with profound circulatory depression.

℞ Tinct. iodinii, fl. ʒ j.

Sig. Apply freely to wound.—*S. Weir Mitchell.*

℞ Aq. ammoniæ, m xxx.

Aq., fl. ʒ iss.

M. Sig. Inject into vein.—*Halford, Dominion Med. Mon.*

SENNA LEAVES IN CHRONIC CONSTIPATION.—Barton Dozier has had great success with senna leaves in chronic constipation—even in cases of more than twenty years' standing. A teaspoonful to a tablespoonful should be taken just before going to bed. The patient will soon learn the amount of leaves necessary for his individual case. A dozen leaves suffice for some, while others require several dozen. The remedy is inexpensive and not at all unpleasant.—*Merck's Archives.*

ACUTE LARYNGITIS.—

℞ Soziodole-sodium, fine powder,

Sublimed sulphur, equal parts.

To be blown upon the affected part every four hours.—*Fritsch, Reidlin, Merck's Archives.*

PREVENTIVE TREATMENT OF IMPENDING COMA DIABETICUM.—In diabetics, after the appearance of the aceto-acetic acid reaction in the urine, the antidiabetic regime should be replaced by a milk diet and thirty grm. of sodium sulphate and twenty grm. of sodium bicarbonate administered internally. The cardiac activ-

ity should be stimulated with digitalis, caffeine and theobromin, while ammonium fluoride is to be given to combat the ferment action.

℞ Ammon. fluor., o.5.

Aq. dest., 300.0.

D. S. One teaspoonful after each cup of milk. Twice daily a grm. of a 25% solution of sodium glycerophosphate is to be injected and oxygen inhalations begun.—*Robin, Therap. d. Gegenw.*

CORN CURE.—

℞ Salicylic acid,

Tinct. cannabis indica, aa ʒ j.

Flexible collodion, q. s. ad ʒ j.

M. Sig. Apply with a camel's hair brush morning and night, limiting the coating strictly to the corn. The applications are continued for several days, and then the parts are soaked in warm water, when the corn may easily be shelled out, in part if not entirely.—*Louisville Med. Mon.*

PROSTATITIS.—

℞ Ichthyol, gr. v-xij.

Ext. belladon., o.25.

Cacao butter, q. s.

Sig. Use two or three such suppositories daily.—*Centralblatt f. d. ges. Ther., N. Y. Med. Jour.*

ACUTE RHINITIS.—

℞ Cocaine hydrochlorate,

Zinc oleate,

Sodium bicarbonate, gr. v.

Starch, q. s. ad ʒ iv.

M. Sig. To be used as a snuff every three or four hours.—*Warren, Med. Age.*

DYSMENORRŒA.—A mixture of caffeine, potassium bromide and tincture of gelsemium, administered for a few days before menstruation, is of much value in the treatment of dysmenorrhœa.—*Talley, Med. Rec.*

COUGH OF PULMONARY TUBERCULOSIS.—

℞ Codeine, gr. iv.

Dilute hydrochloric acid, m xxx.

Spir. chloroform, fl. ʒ iss.

Syr. lemon, fl. ʒ j.

Aq., q. s. ad fl. ʒ iv.

M. Sig. One teaspoonful as occasion demands.—*Murrell, Tex. Med. News.*

ointment for GRANULAR CONJUNCTIVITIS. — Bloebaum (*Deutsche Medicinal-Zeitung*) reports having observed decided benefit from the use of the following ointment in all stages of the disease:

- ℞ Copper sulphate,
Salicylic acid,
Cocaine, aa part 1.
Vaselin, parts 100.

M.—*N. Y. Med. Jour.*

POST-GONORRHOEAL, GLEETY DISCHARGES.—In cases of post-gonorrhoeal, gleet discharges, Dr. Neilson (*Philadelphia Polyclinic*) advises the following injection for daily use:

- ℞ Mercuric chloride, gr. $\frac{1}{16}$.
Zinc sulphate, gr. 12.
Boric acid, 3 i.
Aq. dest., fl. $\frac{3}{4}$ j.

M.—*Ex.*

OBSTINATE VOMITING, ESPECIALLY THAT FOLLOW THE USE OF ANÆSTHETIC.—

- ℞ Acetanilidi, gr. vj.
Caffein citrat., gr. .
Camphor monobromati, gr. vj.

M. et ft. chart. No. vi. Sig. Wash down with water, or else dissolve in a drachm of brandy, pour over cracked ice and give with spoon, one powder every half hour.—*Ex.*

SPASMODIC ASTHMA.—

- ℞ Tinct. lobelia althercial, m xv.
Spir. ætheris, m xx.
Tinct. chloroform camp., m v.
Aq. camphor, q. s. ad $\frac{3}{4}$ j.

M. Sig. To be taken when breathing is difficult.—*The Practitioner.*

CHOICE OF PURGATIVES.—Steinbach (*Deutsche Medicinal-Zeitung*), in introducing his subject, gives the following advice in selecting purgatives for individual cases:

1. When we wish to promote absorption of nutriment and peristalsis by one and the same remedy, we usually select mineral waters of the sodium-chloride group, because they themselves are absorbed by the small intestine, and hence promote absorption in general, while also stimulating peristalsis. According to Pfaff, ox-gall has the same property.

2. If we do not wish absorption, but simply desire watery stools to

flush out the colon, we employ salts of the sodium sulphate type, especially Epsom salts.

3. If we wish to stimulate peristalsis in the colon, with a view of producing plastic stools of a pultaceous consistence, we use rhubarb, senna, aloes, cascara, etc. Hegar's high-flushing of the colon has the same effect.

4. In many cases the foregoing indications may be combined.—*Medical Review of Reviews.—Cincinnati Lancet-Clinic.*

CHRONIC BRONCHITIS AND WINTER-COUGH.—

- ℞ Pure benzene, fl. 3 iss.
Ol. menth. pip., 3 ss.
Ol. olive, q. s. ad fl. $\frac{3}{4}$ ij.

M. Sig. Ten to thirty drops on lump of sugar every three or four hours.—*Louisville Med. Mon.*

ANTIGONORRHOEAL INJECTION.—The *Gazette hebdomadaire de médecine et de chirurgie* gives the following:

- ℞ Gallobromol, gr. 60.
Aq. dest.,
Glycerin, aa m 1,500.

M.—*N. Y. Med. Jour.*

CHRONIC RHEUMATISM.—

- ℞ Sodium iodide, 3 iv.
Colchicum wine, fl. 3 iv.
Ammon. tinct. guaiac.,
Fl. ext. cocoa, aa fl. 3 vij.
Fl. ext. cimicifuga, fl. 3 vij.

M. Sig. One teaspoonful t. i. d. *Eshner, Phila. Poly.*

NEURALGIA OF FIFTH NERVE.—

- ℞ Ext. hyoscyamus,
Ext. valerian, aa gr. iv.
Morphine hydrochlorate, gr. j.

M. et ft. pil. No. iv. Sig. Take one to four in twenty-four hours.—*Kansas City Med. Index.*

PERSISTENT NIGHT-COUGH.—

- ℞ Fl. ext. ergot, fl. 3 j.
Glycerin, fl. 3 iij.
Aq. dest., q. s. ad fl. $\frac{3}{4}$ j.

M. Sig. Teaspoonful at night.—*Rixa, Med. Sum.*

LUPUS.—

- ℞ Sod. sulphoichthyolat, 2.
Aq., 100.

M. Sig. Inject 1 c. c.—*Unna, Med. Rec.*

AFTER PAINS.—

℞ Fl. ext. ergotæ, fl. ʒ j.

Sig. Teaspoonful, and repeat in two hours if pain continues. *Indication:* When pain is result of retained blood clots.

℞ Tinct. opii deodorati, fl. ʒ i.

Chloralis, gr. 40.

Elix. aromatici, q. s. ad fl. ʒ i.

M. Sig. Teaspoonful in water not oftener than every four hours.

Indication: When pain is severe and not due to retained clots.

℞ Phenazoni, 3 ss.

Ft. chart. No. vi. Sig. A powder for pain. *Indication:* When pain is not due to retained clots.—*Dominion Med. Mon.*

GOITRE.—

℞ Iodini (crystals), gr. j.

Potassii iodidi, gr. ij.

Alcoholis, ʒ ij.

Syr. simplicis, ʒ j.

Aq. dest., 3 vj.

M. Sig. Take a teaspoonful in half a glass of water four times daily.

About one-third of my cases during the past five years were treated with the thyroid extract, the others with iodine. The iodine treatment has given the quickest results.—*Schæfer, North American Practitioner.*

GOUTY NEURITIS.—

℞ Colchicine, gr. j.

Quinine sulphate,

Ext. colocynth, aa ʒ j.

M. et ft. pil. No. 60. Sig. One t. i. d.—*Phillips, Med. Rec.*

SCIATICA.—

℞ Ol. hyoscyami,

Ol. terebinthini, aa 5.

Ceræ alb., 2.

Ungt. simpl., 40.

M. Sig. Apply. — *Hirschhorn, Med. Rec.*

WOUND INFECTION.—The occurrence of infection in a wound where primary union was looked for, is almost invariably indicated by elevation of temperature; there may be chill and there is usually pain. Where the infection is of a mild type, however, a slight constant elevation may be for many days the only sign, and must always be regarded with

suspicion, no matter how dry and clean the wound union may seem. Remember that the normal human temperature taken by rectum in the morning is below 99° F.—*Inter. Jour. of Surg.*

SORE NIPPLES.—

℞ Ichthyol, ʒ i.

Lanolin,

Glycerin, aa 3 i ¼.

Ol. olive, 3 2 ½.

M. Sig. Apply. — *Oehren, Med. Rec.*

OIL OF WINTERGREEN IN THE TREATMENT OF ZOSTER.—Chambard-Hénon relates the case of a woman who was attacked with zoster on the nape of the neck and the upper part of the left side of the chest. It was cured in ten days by means of five applications of the remedy.—*Ex.*

HYSTERIA.—

℞ Acid. arsen., gr. ½.

Ferri sulph.,

Ext. sumbul., aa gr. 20.

Asafoetidæ, gr. 40.

M. et ft. pil. No. xx. Sig. One t. i. d. p. c.—*Goodell, Med. Rec.*

ABSCESSSES.—

℞ Collodii fl. ʒ iv.

Sig. Apply freely twice a day.

Indication: To abort small abscess during earliest stages of formation. *Dominion Med. Mon.*

BRONCHORRHEA.—

℞ Benzoic acid, gr. 60.

Tannin, gr. 30.

Divide into twelve powders. Give one powder four times daily.—*Maragliano, Med. Rec.*

RHEUMATIC LINIMENT.—

℞ Tinct. camphor,

Tinct. opium,

Spir. ammonia, aa fl. ʒ ss.

Ol. olive, fl. ʒ j.

M. Sig. Apply on the affected part.—*Dunghison, Merck's Arch.*

SEXUAL ATONY IN WOMEN.—

℞ Ext. cannab. indicæ,

Ext. nucis vomicæ, aa gr. xxx.

Aq. ext. aloes, gr. viij.

M. et div. in pil. No. 100. Sig. One t. i. d.—*Jour. de méd. de Paris, Med. Prog.*

THE PRESCRIPTION

Therapeutic Cullings.

BILIOUSNESS.—

℞ Pulveris ipecacuanhæ, gr. xv.

Ft. chartulæ No. ij. Sig. One powder and repeat in an hour if necessary to produce free emesis. *Indications:* If due to disordered stomach, to be followed by prescription given below:

℞ Sodii hyposulphitis, 3 vj.

Aq, q. s. ad fl. ʒ vj.

Sig. One tablespoonful before each meal.

℞ Hydrargyri chloridi mitis, gr. iss.

Sodii bicarbonatis, gr. xxx.

M. et ft. chartulæ No. x. Sig. One every half hour. *Indications:* Used in catarrhal jaundice with constipation. To be followed by saline purge unless free evacuation.

℞ Sodii sulphat.,

Potass. et sodii tart., aa ʒ j.

Infus. cascarillæ, fl. ʒ viij.

M. Sig. Two tablespoonfuls three times a day.—*Fothergill, Dom. Med. Mon.*

ARGONIN VERSUS BORIC ACID IN ACUTE SUPPURATION OF THE MIDDLE EAR.—Argonin solution is highly antiseptic, while boric acid, if at all, is very slightly so. Argonin in solution can be forced through a small perforation in the drum-head, thus reaching every part of the tympanic cavity and Eustachian tube. In a similar case, boric acid lies inactive in the external auditory canal.

Argonin can be used to flush the middle ear and tube, thus reaching every part of the inflamed tract, carrying out with it all products of inflammation. Argonin excites a positive and decided effect upon the suppurative process; boric acid possesses this property but feebly. Ar-

gonin stimulates the closing of perforations in the drum-head; boric acid has no such action.—*Gray and Thompson, Tex. Courier-Record of Med.*

CREASOTE PILLS.—A formula emanating from Potain is:

℞ Balsam of tolu,

Venice turpentine, aa 3 ½.

Beech-wood creasote, gr. 45.

Gum tragacanth, gr. 24.

Gum Arabic, gr. 45.

Ext. of opium, gr. 4.

Iodoform, gr. 8.

Magnesia, 3 i ½.

Mix and make into 100 pills. Give six to ten such pills in the twenty-four hours.—*Le Progrès Médical.*

SERUM THERAPY. — Serums have been prepared and used with varying success in the following bacterial disturbances of the physical equilibrium, clinically known as diphtheria, small pox, tetanus, tuberculosis, streptococcic infections, typhoid fever, bubonic plague, rabies, cholera, yellow fever, pneumonia, anthrax, syphilis, snake poisoning, ricin poisoning, typhus fever and cancer.—*Mann, Med. Rec.*

ECLAMPSIA.—

℞ Chloral hydrat., 6.

Mistur. gummi, 100.

M. Sig. Half the mixture as an enema.—*Schauta, Med. Rec.*

ICHTHYOL SUPPOSITORIES IN PROSTATITIS.—A. Freudenberg has treated nearly forty cases of prostatitis, some of gonorrheal origin and all chronic or in the later stages of an acute attack, with ichthyol, with remarkably good results. From 5 or 10 to 75 grains of the ichthyol was made into a suppository with from 30 to 38 grains of cacao butter. One

such suppository was used in the morning after defecation and another on retiring at night. He warns against the use of hollow suppositories. In every case there was retrogression, often surprisingly rapid, and in nearly every case complete cure of the pain, pressure, hypertrophy or induration of the gland and of the desire to urinate.—*Merck's Arch.*

ACNE.—

R Acidi arsenosi, gr. j.
Massæ ferri carconatis, 3 iss.
Aloini, gr. vj.

M. et ft. pil. No. xxiv. Sig. One pill after meals. *Indications:* When associated with anemia. Arsenic is contraindicated in all acute cases with inflammation.

R Syr. ferri iodidi, fl. 3 ij.
Ol. morrhuae, fl. 3 iv.

M. et pone in capsulas. No. xxiv. Sig. One capsule two hours after meals. *Indication:* When anemia and struma exist.

R Magnesii sulphatis, ʒ ij.
Ferri sulphatis exsiccati, gr. xvj.
Acidi sulphurici diluti, fl. 3 ij.
Infusi quassiae, q. s. ad fl. ʒ viij.

M. Sig. Tablespoonful before breakfast. *Indications:* Complicated by anemia and constipation. A disagreeable dose although valuable in many cases.

R Huile de cade, 3 ss.
Adipis preparat., 3 j.

M. et ft. ungt. Sig. Apply night and morning.—*Fox.*

R Magnesii sulph., ʒ j.
Ferri sulph., gr. viij.
Acidi sulphurici ar., fl. 3 j.
Aq. menth. pip., fl. ʒ iv.

Sig. Tablespoonful in cup of water, p. r. n.—*Dhring, Dominion Med. Mon.*

EUCAINE HYDROCHLORATE "B" AS A LOCAL ANESTHETIC IN THE NOSE.—Sometime ago the author reported a series of cases in which he had tried eucaine itself, and found that it was unsatisfactory as compared with cocaine. The present report is based upon observations made upon a series of cases in which another preparation of the same drug, called eucaine "B," was employed.

This drug is non-irritating and possesses but a small degree of toxic properties. Its local anesthetic properties are not impaired by boiling.

The following conclusions are reached by the author from a study of the results obtained by the use of this drug as compared with cocaine:

1. Eucaine hydrochlorate "B" in three per cent. solution produces as complete anesthesia of the nasal mucous membrane as does a four per cent. solution of cocaine.

2. Its action is slower than cocaine.

3. The anesthesia is dissipated more rapidly than that produced by cocaine.

4. It is non-toxic in the strength and manner used.

5. As it has no apparent shrinking action on the turbinal investiture as has cocaine, it is, therefore, less valuable for nasal surgery than cocaine.

6. It is superior to the former variety of eucaine because its toxic properties are less, it is more rapid in action, is non-irritating and the same degree of anesthesia may be produced by smaller amounts of the drug.—*Somers, The Ther. Gaz.*

DIPHTHERIA.—Paint the throat five or six times daily with tincture of myrrh, use a one per cent. solution as a gargle and give according to the age:

R Tinct. myrrhæ, m 40.
Glycerini, m 80.
Aq., ʒ iv.

M. Sig. One to four teaspoonfuls every two hours.—*Miloslawsky, Med. Rec.*

PROPER TIME FOR OPERATING ON ADENOIDS.—Max Hagedorn, *Zeitschr. für Praktische Aerzte*. This is an able paper in which the author describes some of the symptoms which follow adenoid hypertrophy and explains their mechanism. Particularly the nasal obstruction which is so often present when it cannot possibly be purely mechanical. In this case the choanæ may be obstructed at the upper part, but an opening exists below. This passage, however, is not free, for oftentimes septal spurs and ridges exist, which, together with the swollen lower tur-

binals, and particularly their posterior portions, tend to narrow it down. Furthermore, this is just the region where the tenacious mucus is most apt to accumulate and offer further obstruction to the passage of air.

In regard to the time for operating, Hagedorn says it is as follows:

1. If nasal respiration is obstructed.

2. If frequent attacks of angina appear.

3. If the hearing is disturbed.

4. If there are present nervous symptoms, such as cough, enuresis nocturnal, headache or aprosexia.

The author has had to operate twice in nursing infants where the obstruction was so great that life itself was threatened, because the children were utterly unable to nurse and breathe at the same time.—*Vit-tum, Ex.*

PRACTICAL SCRAPS.—It seems that M. G. Price, M. D., Mosheim, Tenn., has kept a scrap book in which he has placed a number of prescriptions, etc., which he has tried and found valuable. *The Louisville Jour. of Surg. and Med.*, gives the following from that scrap book:

For abscesses, take boric acid and acetanilid, equal parts, and glycerine to make a thick paste; spread on a soft cloth and apply.

Hyoscyamin is a grand drug in convulsive and spasmodic conditions and we want to know how to administer it to children. Take this little schedule:

Age.	Granules	1-250 gr. Aq.
1-3 mon.	1	3 24;
3-6 "	2	3 24;
6-9 "	3	3 24;
9-12 "	4	3 24;
24 "	6	3 24;
48 "	10	3 24.

Twelve years, one granule every fifteen to thirty minutes until dilatation of pupil.

Bronchitis (acute), take $2\frac{1}{2}$ grains of acetanilid, $2\frac{1}{2}$ grains of salol every four hours. By this I have frequently aborted this trouble in my own case.

For gastric catarrh, sodium salicylate is invaluable.

We sometimes wish to abort an oncoming chill in a patient; fifteen or twenty drops of chloroform may

succeed—if not, we may try atropine or glonoin. [Hypodermic of hydrochlorate of pilocarpine, one-twelfth grain for an adult, is better than either of the above—each of which we have tried.—*Editor Va. Med. Semi-Mon.*].

A cold in the chest with tightness and dry hacking cough may be greatly remedied by giving apomorphin and potassium bichromate.

A cold is sometimes aborted by

R Tinct. gelsemium, gtt. x.

Dover, gr. v.

M. Sig. Every two hours.

Who of us has not been besieged by weary mothers for something for her crying infant that is suffering with three-months colic? Hyoscyamin is the drug.

I want to add my testimony to the efficacy of iodide of lime (the brown article) in croup. It will cure it.

Minute doses of creosote in glycerin is the equivalent of antitoxin.

Nitro-glycerin is a giant in dysmenorrhœa, $\frac{1}{16}$ grain every fifteen to thirty minutes until physiological effect.

Drop doses of tincture cantharides will be found effectual in irritable bladder of women with frequent desire to micturate. Gelsemium is also said to be good.

Don't fail to use turpentine in hemorrhage. Must be given in large doses—one to two drachms without dilution in emergencies.

In two cases of pneumonia we have met with hicough that lasted for four or five days. We found

R Strychnia, gr. $\frac{1}{16}$.

Camphor mon., gr. $\frac{1}{2}$.

Hyoscyamin, gr. $\frac{1}{16}$.

Glycerin and chloroform and hot infusion of capsicum were tried as well as a hypodermic of morphia. The first prescription as well as the morphia succeeded.—*The Va. Med. Semi-Mon.*

EPISTAXIS.—In a case of severe epistaxis, Prof. J. Chalmers Da Costa used Carnot's formula of:

R Normal salt solution, parts xvj.

Gelatin, part j.

Saturating the cotton with this solution, he plugged the nose in the usual way. The advantage of this solution is that it forms an aseptic coagulum.—*Med. World.*

DIPHTHERIA.—

℞ Trypsin (Fairchild's), 3 j.

Sodii bicarb., gr. xx.

Aq., q. s. ad fl. ʒ ij.

M. Sig. Apply with atomizer every hour or two as necessary.—*Keating*.

℞ Acid. boric,

Sodii borat., aa 3 ss.

Sodii chlor., gr. xx.

Aq., O ss.

M. Sig. Inject teaspoonful, warm, in each nostril every two hours. (Nasal form.)—*Starr*.

℞ Ol. eucalypti, fl. 3 ij.

Ol. terebinthinæ, fl. ʒ viij.

M. Sig. Place in shallow vessel and keep boiling over the stove.—*Smith*.

℞ Hydrarg. chlor. corros., gr. j.

Spir. vini rect., fl. 3 ij.

Elix. bism. pepsin, ad fl. ʒ iv.

M. Sig. Teaspoonful every two hours for a child of six years.—*Smith*.

℞ Tinct. ferri chlor., fl. 3 j—fl. 3 iij.

Glycerinæ, q. s. ad fl. ʒ j.

M. Sig. Paint tonsils every four hours.—*Rex*.

℞ Pepsinæ, 3 iss.

Acid. hydrochlor. dil., ʒ m j.

Aq. dest.,

Glycerinæ, aa fl. ʒ ss.

M. Sig. Paint throat. (To remove membrane.)—*Canada Lancet*.

TONSILLITIS.—If quinsy is seen within forty-eight hours after the first onset of the disease it can, in the majority of cases, be aborted to such an extent that suppuration will not take place. When first seen, the following treatment may be given unless there are contraindications for its use: 5 or 10 grains each of calomel and salol followed in six hours by a saline cathartic. After the alimentary canal is thoroughly emptied, lactophenin, given in combination with protonuclein, is one of the best remedies for relieving the discomfort and pain, and aborting or greatly ameliorating the progress of the inflammatory process. For an adult, $7\frac{1}{2}$ to 10 grains of lactophenin and 3 to 5 grains of protonuclein are given in a powder every two or four hours until all pain is relieved and the temperature becomes normal. In addition to this, lithia water is given freely (5 grains in a glass of water

four times a day) for several months after the patient has recovered from the acute inflammatory trouble.

The local treatment amounts to very little; a hot alkaline gargle containing 25 per cent. of pasteurin, listerin, or hydrogen peroxide, used frequently, keeps the mouth clean and sweet and has a happy psychological effect. If the tonsils are enlarged and follicles blocked up with secretory and inflammatory products they may be cleaned out with probe and well-directed spray of antiseptic solution from atomizer with tip that throws the spray laterally. If deglutition is very painful, nothing affords such great relief as an application of 10 per cent. each (in aqueous solution) of cocaine and resorcin, applied by means of camel's hair brush or cotton-covered probe, to the pillars of the fauces. This can be repeated as necessary, though never oftener than every two hours, even in aggravated cases. If tension is great it is best relieved by puncturing the tense sheath separating the tonsil from the peritonsillar areolar tissue. The point selected for this purpose is near the junction of the anterior and posterior pillars of the fauces.—*Stucky, Memphis Lancet*.

HAY ASTHMA.—Hay asthma, with cough and difficult expectoration following exposure:

℞ Ammon. chlorid., 3 iv.

Tinct. hyoscyami,

Syr. scillæ comp.,

Syr. senegæ,

Syr. toltanæ, aa 3 j.

M. Sig. Teaspoonful every three hours.—*Eshner, Med. Rec.*

CHLOROFORM AS A HEMOSTATIC.—According to the *Jour. de méd. de Paris*, Dr. Spaak, of Brussels, has obtained excellent results from a mixture of two parts of chloroform with one hundred parts of water. This mixture is said to rapidly arrest hemorrhage after tooth extraction.—*N. Y. Med. Jour.*

CONVULSIVE COUGH.—The *Riforma medica* gives the following:

℞ Fl. ext. of thyme, gtt. 165.

Syr., gtt. 1,050.

M. Three to six dessertspoonfuls daily, well diluted.—*N. Y. Med. Jour*

DIARRHŒA MIXTURES.—

- ℞ Tinct. catechu,
Tinct. of opium, aa cc. 0.6.
Chalk mixture, cc. 30.

Repeat this dose every two hours till relieved.

- ℞ Comp. tinct. lavender, cc. 120.
Sugar, grm. 15.
Camphor aq., to make cc. 500.

Dose, tablespoonful every two hours.

- ℞ Tannalbin, grm. 1.
Powdered opium, grm. 0.06.

Take one such powder every two or three hours until relieved.

This is a very good combination and one greatly favored. Its action is prompt and highly satisfactory.

- ℞ Lactic acid, grm. 10.
Syr., grm. 200.
Aq., grm. 800.

Dose, tablespoonful every two hours (in chronic diarrhœa).

- ℞ Tinct. capsicum, cc. 4.
Spir. peppermint, cc. 8.
Tinct. opium, cc. 12.
Comp. tinct. catechu,
Tinct. kino,
Tinct. krameria,
Spir. camphor,
Aq., aa cc. 16.

Dose, one-half to one teaspoonful.

- ℞ Aromatic sulphuric acid,
Tinct. opium, aa cc. 8.
Aq., to make cc. 30.

Dose, teaspoonful in water every four hours.—*Merck's Reports*.

CHOLERA MORBUS.—Packard recommends the following prescription in cholera morbus to restore the mucous membrane to a normal condition:

- ℞ Hydrargyri chloridi mitis, gr. $\frac{1}{15}$.
Pulv. aromatici, gr. 2.
Ext. pancreatici, gr. 5.
Bismuthi subnitrat, gr. 10.

M. Ft. chart. No. 1. Sig. Take every three hours.—*Jour. Amer. Med. Asso.*

POTASSIUM IODIDE IN CEREBRO-SPINAL MENINGITIS.—A. J. Moody (*Merck's Archives*) says that in the severe or apoplectic form of this disease no method of treatment offers a hope of cure. In the milder forms potassium iodide is the only drug which has shown any power to modify the disease. It should not,

however, be relied upon to the exclusion of other remedies which may make the patient more comfortable and enable him to resist the exhaustion which accompanies the disorder. He does not consider the known influence of iodide upon absorption a sufficient explanation of its usefulness, but thinks it has some quality which acts as an antidote to the toxins produced by the organisms, or it is unfavorable to their development—*Ex.*

AORTIC INSUFFICIENCY IN ACUTE ARTICULAR RHEUMATISM—The *Riforma medica* gives the following as Garrien's formula:

- ℞ Sparteine sulphate, gr. $1\frac{1}{2}$.
Syr. of digitalis,
Syr. of bitter orange peel, aa gr. 450.
Gum aq., gr. 900.

M. Sig. A tablespoonful every four hours.—*N. Y. Med. Jour.*

WHOOPIING COUGH.—According to J. B. Busdraghi, Madrid, we should carry out three indications, namely:

1. Disinfection.
2. Quieting the nervous system.
3. Preserving bodily strength.

For the first, Busdraghi employs a carbolic acid spray (sol. of carbolic acid 2 per cent.), for ten minutes at a time, once daily; for the second, trional has served him well in bringing about a quiet, lengthy sleep; the dose, according to the age of the patient, is 0.1 to 0.5 ($1\frac{1}{2}$ to $7\frac{1}{2}$ grains). Should this remedy be insufficient, he adds to it a spoonful of a 1 per cent. solution of chloral hydrate. For the third—the preservation of the strength—proper food is employed. Busdraghi has used somatose as a food with good result, which he prescribes, according to age, three or four times a day, in doses of one-fourth to one half a teaspoonful dissolved in milk.—*La Corresp. Med.; Pediatrics*.

ACUTE BRONCHITIS.—

- ℞ Wine ipecac,
Wine antimony, aa fl. 3 ij.
Glycerin, fl. 3 iv.
Sol. ammonium acetate, fl. 3 j.
Aq., to make fl. 3 iij.

Teaspoonful every three or four hours.—*Med. Rec.*

BUBO.—

℞ Liq. plumbi subacetatis,
Tinct. opii, aa fl. ℥ j.

M. Sig. Add to one pint of water and keep constantly and freely applied. *Indications:* To abort or lessen pain. Incise freely and curette if it suppurates.

℞ Tinct. iodi., fl. ℥ j.

Sig. Paint well every other day until skin becomes tender.—*Van Buren.*

℞ Cadmii iodid., gr. xxx.
Adipis, 3 j.

M. Sig. Apply twice daily.—*Martin.*

℞ Hydrogen peroxide (Marchand's solution), fl. ℥ vi.

Sig. Apply with an atomizer after suppuration has begun.—*Ringer, Dominion Med. Mon.*

CHEYNE-STOKES BREATHING.—Rabe (*Gazette hebdomadaire de Médecine et chirurgie*) gives an elaborate description of Cheyne-Stokes breathing, and suggests the following treatment: Morphine, notwithstanding earlier observations to the contrary, has been found of distinct value by Huchard, Gubler and others. It seems to allay anxiety, relieve the dyspnea, and to induce sleep. It should be administered at night and in small doses, on account of the frequent association of chronic nephritis. According to Rabe, who cites many instances, a combination of morphine with digitalis is the most efficient remedy when the dyspnea is a symptom of atheroma with weak heart.—*Ex.*

DIURETIC IN CHRONIC INTERSTITIAL NEPHRITIS.—

℞ Ferri citratis, 3 ii ℥ ij.
Potassii citratis, 3 v ℥ j.
Syr. limonis, ℥ ij.
Aq., q. s. ad ℥ viij.

M. Sig. Dessertspoonful before each meal well diluted.—*Danforth, Med. Rec.*

WHOOPIING-COUGH AND ITS ORDINARY APPEARANCES IN THE NOSE, EAR AND THROAT.—Hagedorn (*Wien. Klin. Woch.*) This author describes the local lesions of whooping-cough in the nose, ear and throat. He claims that there is a diffuse inflammation of the entire air passage, but

in most cases there is also a circumscribed redness and swelling, which makes its appearance upon the anterior surface of the posterior wall of the larynx in the region of the arytenoid cartilages and the vocal cords. [In children this is of not the slightest importance, but in the adult it may help to a diagnosis of whooping-cough in doubtful cases. Lesions in the nose and ear are those of an ordinary catarrhal inflammation.—*ED.*]—*Post-Graduate.*

RHEUMATISM.—

℞ Ac. salicyl. pulv.,
Ol. terebinth, aa 3 j.
Lanolin, ℥ j.

M. Sig. Use as an ointment, first cleaning the skin with soap and water. Use friction for five minutes. *Husson, Revue de Thérapie.*

PICOT'S VESICAL INJECTION FOR GONORRHOEAL CYSTITIS.—The *Riforma medica* gives the formula as follows:

℞ Guaiacol, parts 5.
Iodoform, part 1.
Sterilized olive ol., parts 100.

M. From ten to twenty drops to be injected into the bladder once or twice a day.—*N. Y. Med. Jour.*

DELICATE TEST FOR SUGAR.—

℞ Cupric sulphate, gr. xxvij.
Glycerin, 3 iij.
Aq., 3 iiss.
Liq. potassa, ad ℥ iv.

Dissolve the cupric sulphate in glycerine and heat. When cold add the liquor potassa. Pour a drachm of the solution in a test tube with two or three drops of a saturated solution of pure tartaric acid and boil. Now add, drop by drop, eight drops of urine. If there is no reaction there is no sugar. Sugar is present if the reaction yields a yellowish, reddish or greenish-gray deposit.—*Scientific Amer.*

NEURALGIC HEADACHE.—

℞ Antipyrin, 3 iss.
Acetanilid, 3 ss.
Camphor monobromate, 3 j.
Caffein, 3 ss.
Phenacetin, 3 ij.

M. Div. in chart. No. 20. Sig. Take one and repeat in one hour if unrelieved.—*Wendt, Ex.*

BUNIONS.—

R Acidi tannici, gr. xv.

Ichthyoli, fl. 3 iv.

Adipis lanæ hydrosi., q. s. ad
 3 j.

M. Sig. Apply freely after removing epidermis with blister.

R Cerati plumbi subacetatis, 3 j.

Sig. Apply freely. *Indications:* Used to relieve pain and inflammation.

R Liq. plumbi subacetatis,

Tinct. opii., aa fl. 3 ss.

Aq. dest., q. s. ad fl. 3 viij.

M. Sig. (Local use only.) Apply freely on soft cloths or absorbent cotton. *Indications:* Used to relieve pain and inflammation.

R Tinct. iodinii,

Tinct. belladonnæ, aa fl. 3 j.

M. Sig. Apply twice daily.—*Dominion Med. Mon.*

BLOOD-LETTING IN ITALY.—In some parts of Italy blood-letting is still held to be a cure-all. Sometime ago a sick child was bled until the mother timidly protested. The doctor assured her that one more application of the cups would insure recovery. In spite of this, the next morning, when the doctor came, the mother sobbed out that her baby was dead. "Madam," said the doctor, "be comforted by knowing that your child died cured."—*The Med. Age.*

COMEDO-ACNE.—Von Hebra and Unna recommend the following ointment:

R Ichthyol,

Bismuth subnitrate,

Ammoniated mercury, aa 3 j.

Vaselin, 3 x.

Apply at night.—*Amer. Med. Bull.*

BICHRIMATE OF POTASSIUM AS AN EXPECTORANT.—Dr. J. E. Weaver in the *N. Y. Med. Record*, states that bichromate of potassium is especially useful in both laryngitis and bronchitis, if secretion is stringy and hard to raise. After the second or third dose the expectoration becomes loose and easy, and rapidly disappears, and with it the local trouble which is its cause. In tonsillitis, where the onset is rapid, the tonsils rough, raw and angry looking, with muco-purulent secretions exuding from the follicles, he values the drug

more highly; also in cases of non-diphtheritic, pseudo-membranous tonsillitis this remedy is so sure in its effects as to merit the title of specific. In treating laryngitis and bronchitis with this remedy one must be careful not to use it too strong—not more than one grain well triturated to three or four ounces of water, a teaspoonful every one-half to two hours. But in tonsillitis the finely powdered bichromate should be added to the water until the latter is of a dark lemon or light orange shade, and of this a teaspoonful should be given every hour. In these cases the only limit to the administration of the drug, nausea. If this symptom appears lessen the dose. After the third or fourth dose improvement should be noticed.—*Cincinnati Lancet-Clinic.*

CHRONIC COLITIS IN CHILDREN.—

R Acid. hydrochlorici, gtt. v.

Aq. destil., 3 iij.

Syr. gum arabici, 3 vj.

Tinct. opii, gtt. ij.

M. Sig. One or two teaspoonfuls twice a day.

If it is evident that putrefaction is going on in the intestines:

R Benzo-naphthol,

Beta-naphthol, aa gr. ij.

Bismuth salicylat., gr. j.

Pulv. gum arabici, gr. v.

M. ft. pulv. No. 1. Sig. One three times a day to a child of four years. Continue this for four or five days. *Romme, La Presse Méd.*

IODOFORM PENCILS.—The *Jour. de méd. de Paris*, attributes the following prescription to Poinsoot:

R Powd. iodoform,

Gelatin, aa equal parts.

These pencils are soft. Harder ones are made as follows:

R Iodoform,

Cacao butter, aa equal parts.

N. Y. Med. Jour.

CREOLIN IN THE TREATMENT OF ERYSIPELAS AND ACUTE ECZEMA.—Rotæ's formula is given as follows in the *Riforma medica*:

R Creolin, gr. 22.

Prepared chalk,

Lard, aa gr. 225.

Ol. of peppermint, gtt. 5.

M.—*Ex.*

BITES OF VERMIN.—

- ℞ Naphthol, 3 i-2.
Ether, q. s. ad sol.
Menthol, gr. 4-46.
Vaselin, 3 3.

M. Sig. External use.—*Medical Standard.*

ASTHMA.—The following prescriptions were recommended by Dr. Pepper for asthma, in the attack:

- ℞ Morphine sulphatis, gr. $\frac{1}{4}$.
Strychnine sulphatis, gr. $\frac{1}{16}$.
Hyoscine hydrobromatis, gr.

$\frac{1}{16}$.

M. Sig. Administer by hypodermic injection each night.

- ℞ Ethereal tinct. of lobelia, 3 ij.
Tinct. of asafoetida, 3 j.
Tinct. of opium, 3 ss.
Potassium iodid., 3 ij.
Syr. of tolu, 3 iv.

M. Sig. From one to two teaspoonfuls every one or two hours for an adult, according to the severity of the case.

- ℞ Ammonii bromidi, 3 vj.
Ammonii chloridi, 3 iss.
Tinct. lobeliae, 3 ij.
Spir. etheris comp., 3 j.
Syr. acaciae, ad 3 iv.

M. Sig. Dessertspoonful in water every hour or two during paroxysms.

The following prescriptions have been used with varying success.

- ℞ Ext. euphorbiae piluliferæ, m 3.
Nitroglycerin, gr. $\frac{1}{16}$.
Sodii iodidi,
Potassii bromidi, aa gr. 2.
Tinct. lobeliae, m 2.

M. Ft pil. vel capsul. No. 1. Sig. From one to four three times a day.

Inhalation:

- ℞ Potassii nitratis,
Pulv. anisi fruct., aa 3 ss.
Pulv. stramonii fol., 3 j.

M. Sig. Use a thimbleful, place on plate, light with match, then inhale fumes.

Spasmodic asthma:

In spasmodic asthma the patient should not only take arsenic but should smoke arsenic cigarettes. The ordinary arsenical cigarette is made by saturating paper with a solution containing 15 grains of the arsenite of potassium in an ounce of water. The portion of the paper which comes in contact with the lips should not be impregnated, or, better still, a mouthpiece should be used.

In addition to smoking these cigarettes, the patient should use this fuming inhalation at bedtime:

- ℞ Powd. anise fruit, 3 j.
Powd. fennel fruit, 3 ss.
Powd. sumbul root,
Powd. stramonium leaves,
Iodid. of potassium, aa 3 ij.
Powd. niter, 3 ij.

The ingredients should be perfectly dry and intimately mixed. A tablespoonful should be ignited and the fumes inhaled.—*Murrell, Jour. Amer. Med. Asso.*

LANOLIN AS AN AGENT IN THE REDUCTION OF ENLARGED GLANDS.—A. C. Frickenhaus (*Monatshefte für Prakt. Dermatol.*) reports the rapid reduction in size of enlarged glands after inunction with lanolin. The axillary glands were enlarged and painful, following recurring furunculosis of the trunk and thorough application of lanolin over the enlarged glands was followed by diminution in their size and marked lessening of pain. Similar results were obtained in a case of angina tonsillaris, accompanied by enlargement of the tonsils and pain on swallowing. *Med. Rev. of Revs.*

DYSMENORRHEA.—The *Jour. of the Amer. Med. Asso.* attributes the following to Cushing and Cumston:

- ℞ Antipyrine, 3 iiss.
Ammonii bromid.,
Potassii bromidi, aa 3 i $\frac{1}{4}$.
Ext. viburni prunifol., 3 v.
Spir. vini gallici,
Syr. aurantii, aa 3 x.
Aq. destil., 3 xss.

M. Sig. A teaspoonful four or five times daily.—*Med. Bulletin.*

PROPER FOOD FOR SCHOOL CHILDREN.—Mrs. Rorer claims the apple to be the most valuable of fruits. She says: "It has been my observation, after most careful experiments, that both children and adults who eat freely of good ripe mellow apples, either raw or baked, and with the skins removed, are free from various forms of indigestion, liver trouble and constipation; a scraped apple is more easily digested than one partly masticated. The skin of an apple is no more desirable than the outside bran of wheat. The

ripe mellow peach is really the only fruit for children. The banana, in its true home, where it becomes mature before picking, forms an important part of the diet of the inhabitants. Many varieties, however, used there in an uncooked condition, will not bear transportation; consequently those which are sold in our markets are of an inferior variety, picked long before they are ripe or mature; and the ripening of which is almost a premature decay; they are exceedingly difficult of digestion and children should never be allowed to eat the ordinary banana unless cooked. Baked bananas are very popular. Fried bananas, as well as all other fried foods, are to be condemned.—*Tri-State Med. Journal and Practitioner*.

DENTAL CARIES.—The *Riforma medica* ascribes the following to Dauchez. Introduce into the dental cavity, previously dried, a plug of cotton impregnated with one of the following preparations:

- ℞ Hydrochloride of cocaine,
Menthol, aa gr. 1½.
Liquefied crystals of carbolic acid, gtt. i.
Essence of cloves, gr. 75.
Camphorated alcohol, gr. 120.

M.

Or:

- ℞ Orthoform,
Carbolic acid, aa gr. 15.
Camphor,
Chloral hydrate, aa gr. 60.

M.—*N. Y. Med. Jour.*

EUPHTHALMINE AS A MYDRIATIC.—Dr. H. Darier (*Clinique ophthalmologique; Therapist*) reports that since he began to use euphthalmine for ophthalmoscopic examinations he has never observed any of the unpleasant symptoms so frequently met with after the use of other mydriatics. The patients have never complained of any inconvenience except a slight dimness. The same evening, the euphthalminized eye has always returned to its normal state. This agent is recommended to be employed in doubtful cases, where it is desired to ascertain if one has to deal with an iritis. If there is really iritis, atropine will have no ill effect, but if, on the contrary, the case is

one of simple circumcorneal hyperæmia, etc., one will have caused eight or ten days of paralysis of accommodation, whereas if dilatation had been effected with euphthalmine in a rapid, regular and complete manner, quite as accurate a diagnosis could have been made without causing any of the inconveniences following the use of atropine. He uses one or two drops of a five per cent. solution.—*N. Y. Med. Jour.*

BROMOFORM SYRUP.—The following formula has been warmly recommended:

- ℞ Bromoform, *m* 40.
Tinct. aconite (green), *m* 50.
Syr. codeine, 3 iss.
Syr. tolu,
Syr. red poppy, aa 3 ivss.
Alcohol, 3 iiss.

The dose can be graduated according to the age of the patient. This mixture has been found useful in whooping-cough, bronchial catarrh and the pneumonia following measles. *Med. Surg. Bulletin*.

HEREDITARY SYPHILIS.—Even if brought into the world alive, the product of syphilitic conception has a relatively weak hold on life. This is instanced in the well known statistics of the Moscow Hospital, in which, of two thousand syphilitic children born in eleven years, over 70 per cent. died. Fournier makes the mortality 28 per per cent. from exclusive paternal heredity, 60 per cent. from maternal heredity, and 68.5 per cent. from a mixed heredity. Some figures are even more appalling.—*Bulkley, Med. Rec.*

LOCAL ANESTHETIC.—

- ℞ Menthol, 3 j.
Chloroform, 3 x.
Ætheris, 3 xv.

M. Sig. Use as a spray over field of operation. Anesthesia lasts from two to six minutes.—*Louisville Med. Mon.*

QUININ SULPHATE IN EXOPHTHALMIC GOITER.—Paulesco, in collaboration with Raynier, has made certain studies in regard to the pathogenesis of exophthalmic goiter. He believes that the principal trouble in this affection is the vasodilatation which

affect the blood vessels of the neck and head. As the result of this distension we have tremor, the goitrous swelling and active congestion of the thyroid body which produces in its turn a hypersecretion of the gland, and which has a distinct physiologic action. Paulesco claims that he has employed the sulphate of quinin with remarkable results, arising from its influence in producing vasoconstriction of the vessels of the head and neck. He gives fifteen grains of it at night after supper, and again a quarter of an hour later. He states that this treatment decreases the tachycardia, diminishes the exophthalmus and the size of the goitrous swelling.—*Revue de Therap. Med. Chir.*

COUGH MIXTURE—Dr. L. M. Taylor (*Merck's Archives*) has used the following prescription with most satisfactory general results:

℞ Chloral hydrate, gr. 64.
Ammonium carbonate, gr. 32.
Fl. ext. of ipecac, fl. 3 j.
Spir. of nitrous ether (Squibb), fl. 3 ij.
Syr. of tar,
Syr. of wild cherry,
Syr. of tolu,
Camphorated tinct. of opium,
aa fl. 3 j.

Shake well and take a teaspoonful when the cough is troublesome.—*N. Y. Med. Jour.*

THE ACTION OF MINERAL WATERS AND DRUGS ON THE BILE.—Dr. W. Bain (*Journal of Balneology*) places on record his investigations in the case of a man forty-nine years of age, who had a permanent cutaneous biliary fistula. He concludes as follows:

1. The amount of bile secreted in the twenty-four hours, in a man somewhat below the medium height and weight, averages 775 c. c., and the bile solids average 15.8 grm.

2. More bile is secreted during the day than at night.

3. The sulphocyanate of potassium in the saliva is not derived from the biliary salts.

4. The old sulphur spring at Harrogate, Carlsbad mineral water, euonymin, benzoate of sodium, salicylate of sodium, and the Kissingen

Spa spring of Harrogate increase both the quantity of the bile and bile solids.

5. Podophyllo resin and iridin augment the bile solids without appreciably affecting the quantity of bile.

6. The strong Montpellier spring of Harrogate and podophyllo-toxin appear to diminish slightly both the quantity and the solids.

7. Hot water and soda water in pint doses do not seem to increase the biliary secretion.

8. Salicylate of sodium increases the excretion of uric acid in the urine.—*Med. Rec.*

FLATULENT DYSPEPSIA.—While the following formula is not pharmaceutically elegant, it is at times exceedingly efficient in the treatment of gastric fermentation:

℞ Bismuth salicyl.,
Magnes. carb., aa 3 ij.
Carbo pulv., 3 iij.
Ol. menth. pip., gtt. xxx.

Of this powder give a small teaspoonful one-half to one hour after meals.—*Jour. Amer. Med. Asso.*

OXYCAMPHOR AS A REMEDY FOR DYSPEPSIA.—Jacobson (*Berliner klin. Woch.; Wiener med. Blätter*) recommends the use of "oxaphor" (a fifty per cent. alcoholic solution of oxycamphor) according to the following prescription:

℞ Oxaphor, parts 10.
Alcohol, parts 20.
Tinct. of licorice, parts 10.
Distilled aq., q. s. to make parts 150.

M. Sig. A tablespoonful three times a day.

He has usually found the drug of service in dyspepsia, whether of pulmonary, cardiac or renal origin.—*N. Y. Med. Jour.*

DIFFUSIBLE STIMULANT FOR NEURASTHENIC HEADACHE, ESPECIALLY IN WOMEN.—

℞ Ammonii carb., 3 iij.
Tinct. sumbul, 3 vj.
Spir. lavandulæ, 3 j.
Elix. ammonii valerian, ad 3 viij.

M. Sig. Two teaspoonfuls every three hours in water.—*Collins, Med. Rec.*

HAY FEVER.—For this distressing disease Dr. William Murrell recommends the following for inhalation:

- ℞ Menthol, gr. viij.
Chloroform, *m* v.
Benzol, *m* xx.
Ol. of cassia, *m* iij.
Light carb. of magnesia, gr. xx.
Aq., q. s. ad § j.

M. Sig. A teaspoonful is poured into a pint of hot water at a temperature of 140 F., and the vapor is slowly inhaled for ten minutes.

The following prescriptions have been recommended for this disease:

- ℞ Menthol, gr. xx.
Ol. amygdalæ dulcis, 3 ij.
Acidi carbolici, *m* x.
Cocainæ hydrochloratis, gr. vi.
Ungt. zinci oxidi, § ss.

M. Sig. Apply thoroughly to the nostrils on cotton attached to a toothpick.—*Smith*.

- ℞ Cocaine,
Menthol, aa o.5.
Boric acid,
Powd. acacia, aa 5.0.

M. Sig. Use as a snuff.

- ℞ Camphor, gr. x.
Boric acid, 3 j.

M. Sig. Use as a snuff.—*Jour. Amer. Med. Asso.*

ACUTE ENTERITIS IN INFANTS.—*Merck's Archivus*:

- ℞ Tannalbin, gr. xv.
Spir. cinnamon, gtt. ij.

Divide into ten powders and give one every three or four hours to children one year old. Double dose for two year old; treble for three year old, etc.—*Gundobin, Djetskaja Medicina*.

INGROWING NAILS.—I wish to call attention to a method of treatment for this painful affection which I have used for many years, and I do not remember a failure to promptly effect a cure.

1. Remove all pressure from the nail by cutting away a piece of the shoe.

2. Disinfect with hydrogen dioxide until no more "foam" appears.

3. Apply a drop of strong solution of cocaine in the base of the ulcer.

4. Apply a drop of Monsell's solution to the ulcer, then cover loosely with gauze. Repeat this process

every second day, until the edge of the nail is released by the retraction of the hypertrophied tissue. The patient suffers no pain from the application, and all pain has disappeared the second day. The cure is effected in a week or two, without inconvenience or interference with business.—*Kinsman, Columbus Med. Jour.*

HYDRORRHEA ACCOMPANYING HAY FEVER.

- ℞ Sodii bisulphatis, part 1.
Aq. dest., parts 500.
Or the exhibition of a wash of
℞ Acidi acetici, *m* ij.
Resorcini, gr. iss.
Sodii chloridi, gr. iv.
Aq. dest., § j.

Miller says, "Change of residence, if possible, before the known date of annual recurrence, is the only positive prophylaxis or cure."

Make sure that the nasal passages are free from irritating obstruction. After a course of Carlsbad salts and spraying the nostrils with Carlsbad water, douche the mucous membrane with a strong solution of nitrate of silver, and, as an after-treatment, apply:

- ℞ Menthol,
Resorcini, aa gr. 45.
Spir. vini diluti, § 4.

Jour. Amer. Med. Asso.

BALDNESS.—Dr. Whitla gives this as one of the best combinations in the treatment of baldness:

- ℞ Pilocarp. hydrochloratis, gr. v.
Otto rosæ, *m* viij.
Ol. rosmarini,
Liniment cantharidis, aa 3 iv.
Glycerini puri, § j.
Ol. amygdalæ dulcis, 3 ij.
Spir. camphoræ, § iij.

M. Sig. To be rubbed well into the scalp, night and morning.—*Med. Standard*.

DRY ECZEMA.—The following application has been found valuable in the treatment of some forms of eczema, especially when affecting the hands:

- ℞ Sulphurous acid, § j.
Glycerine, 3 j.
Aq., § ij.

M. Sig. To be applied to the parts night and morning.—*Ex.*

ALCOHOLISM.—Jergolski claims that eight drops of tincture of strophanthus three times a day will create a distaste for drink.

The following prescriptions have been recommended for alcoholism:

- ℞ Auri et sodii chloridi, gr. $\frac{1}{4}$.
Strychnine nitratis, gr. $\frac{1}{16}$.
Nitroglycerini, gr. $\frac{1}{16}$.
Atropine sulphatis gr. $\frac{1}{16}$.
Digitalini, gr. $\frac{1}{16}$.
Sodii chloridi, gr. $\frac{1}{4}$.

M. et ft. tab. No. 1. Sig. For hypodermic use.—*Dunham*.

- ℞ Spir. ammonii aromatici, 3 iij.
Tinct. camphoræ, 3 iss.
Tinct. hyoscyami, 3 iiss.
Spir. lavandule comp., q. s. ad $\frac{3}{4}$ ij.

M. Sig. One teaspoonful every hour.

Tyson recommends the following to prevent the adynamia which may follow the sudden withdrawal of alcohol:

- ℞ Spir. ammonii aromat., 3 $\frac{1}{2}$.
Strychnine, gr. $\frac{1}{4}$.

M. Sig. For one dose; repeat every three hours.

To relieve the symptoms of gastritis and the craving for alcohol:

- ℞ Decocti althæ, $\frac{3}{4}$ v.
Aq. chlori, 3 ij.
Sacchari, 3 ij.

M. Sig. Tablespoonful every two or three hours.—*Zedekauer, The Med. and Surg. Monitor*.

HEART-WEAKNESS.—Dr. Amasa M. Bucknum, of Denver, Col., gives the *Colorado Med. Jour.* the following prescription as useful in heart failure, in pneumonia and typhoid fever, in which he had learned its value:

- ℞ Digitalin (Merck's), gr. ij.
Strychnia sulphas, gr. j.
Acid. muriatic, dil., fl. 3 iv.
Elix. simp., q. s. ad fl. $\frac{3}{4}$ iv.

M. Sig. One teaspoonful every three or four hours.—*Amer. Bull.*

RATIONAL ADMINISTRATION OF COD LIVER OIL.—An article in *Echo Med.* states that cod liver oil as usually administered is worse than useless. It should never be taken except after meals, and, if possible, fully an hour should elapse to allow time for the stomach to secrete undisturbed. Two spoonfuls should be taken twice a day, increasing by two a month to

a maximum of eight in January, and then decreasing in the same manner. The spoon used should be a tea, dessert or tablespoon, according to age and the case. The oil has no therapeutic effect, he adds, but is merely for superalimentation.—*Jour. Amer. Med. Asso*

DIARRHŒA.—In summer diarrhœa Dr. G. J. achim prescribes:

- ℞ Tannopin, gr. 5-7.
Calomel, gr. $\frac{1}{16}$.

M. Sig. To be taken in one dose; 3 to 4 powders daily.

This medication proved of great value in fifty-one cases of acute intestinal or gastro intestinal catarrhs. *Archives of Pediatrics*.

Dr. G. C. H. Mever advises the following mixture in cases of dysenteric diarrhœa in children:

- ℞ Castor oil, m viii-x.
Powdered gum arabic, q. s. ad emulsion.
Tannopin, gr. iv.
Camph tinct. of opium, m x.
Aq. menth. pip, q. s. ad 3 j.

M. Sig. This amount to be taken every two hours.—*N. Y. Med. Jour.*

WARM COCAINE.—The local anesthetic effect obtained with cocaine is more rapid, more intense and more lasting if the solution is warm. The dangers of intoxication are thus much diminished, as the quantity of cocaine can be very much reduced if it is warmed. A solution of 0.5 or 0.4 per cent. heated will produce a powerful effect.—*Da Costa, Vermont Med. Mon.*

SYRUP OF ARSENATE OF IRON.—The *Riforma Medica* credits the following to Griggi:

- ℞ Arsenate of sodium, gr. 4 $\frac{1}{16}$.
Pure ferrus sulphate, gr. 5 $\frac{1}{2}$.
Citric acid, gr. 12
Aq. dest, gr. 150.
Syr., gr. 14,850.

M. Sig. From two to six teaspoonfuls daily, before meals. —*N. Y. Med. Jour.*

CEREBRO-SPINAL MENINGITIS.—

- ℞ Potass. iodid., gr. viij.
Aq. font.,
Syr aurant. cort., aa fl. 3 iv.

M. Sig. Teaspoonful every two hours.—*Med. Rec.*

HEADACHE.—

- R Magnesium sulphate,
Sodium sulphate, aa $\frac{3}{4}$ j.
Dil. sulphuric acid, fl. 3 ij.
Comp. tinct. of cardamom, fl.
 $\frac{3}{4}$ iss.
Syr. orange peel, fl. $\frac{3}{4}$ j.
Aq. cinnamon, fl. $\frac{3}{4}$ ij.

M. Sig. Two fluidrachms to be given twice daily. (Plethoric headache of pregnancy.)

- R Iron sulphate, gr. xxxij.
Magnesium sulphate, 3 xij.
Dil. sulphuric acid, fl. 3 iiss.
Comp. tinct. of cardamom,
Aq. allspice, aa fl. $\frac{3}{4}$ ij.

M. Sig. Two fluidrachms to be given twice daily. (Congestive headache.)—*Dunghison's Col. and Clin. Rec.*

CHELIDONIN IN CARCINOMA OF THE STOMACH.—Dr. M. N. SWANOW (*Medicinskoje Obsoznie*) recommends chelidonin, the active principle of chelidonium majus, for malignant growths. He employed chelidonin sulphate 0.1 cgm. in water twice daily, with good results in a case of carcinoma of the stomach. The patient, fifty-two years old, was very much emaciated, vomited frequently, had intense abdominal pain, could not digest food in any form, and was kept alive with nutrient enemata. After twelve days' treatment with chelidonin, improvement was very marked and the pain disappeared; the patient retained semi-solid food, increased in body weight, and left the hospital improved.—*Med. Rec.*

CATARRHAL AFFECTIONS FOLLOWING MEASLES AND WHOOPING-COUGH. HOCK advises the employment of creosote, prescribing as follows:

- R Creosoti, m 15.
Saccharini, gr. $\frac{3}{4}$.
Ol. morruæ, $\frac{3}{4}$ 3.

M. et ft. emulsio. Sg. From two teaspoonfuls to three tablespoonfuls a day.—*Peoria Med. Jour.*

EARLY MORNING DIARRHEA.—Lemine (*Nord Med., Med. News*) thinks that the morning diarrhea, occurring especially in nervous individuals with an excess of hydrochloric acid, can be favorably affected by a suitable diet. Roast or broiled meat should be taken at

supper time and no vegetables. He gives his patients one-half to one dram (2 to 4 grams) of bicarbonate of soda before the evening meal, and at bed time $2\frac{1}{2}$ drams (10 grams) of gelatinized phosphate of chalk, either in milk or in syrup.

Diarrhea after meals occurs also in hyperchlorhydric persons. They should be put on a correct diet, and should lie down after eating. Each meal should be followed by two or three drops of acetum opii in a little water.—*Four. American Med. Asso.*

CONFECTION OF CINCHONA.—*Riforma medica* attributes the following formula to BrisseMORET:

- R Caffeine, gr. 45.
Ext. of cinchona, gr. 187 $\frac{1}{2}$.
Citric acid, gr. 30.
Tinct. of vanilla, gr. 7 $\frac{1}{2}$.
Alcoholate of citron peel, gr. 30.
Rum, gr. 600.
Syr., gr. 2,250.
Gelatin, gr. 150.
Glycerin, gr. 600.
Aq., gr. 1,350.

M. Sig. Take as much as will lie on the point of a knife (*sic*) daily. *N. Y. Med. Jour.*

HERPETIC AFFECTIONS OF THE CORNEA.—M. GALEZOWSKI (*Recueil d'ophtalmologie; Journal des praticiens*) recommends the following pomade:

- R Vaseline, gr. 150.
Neutral hydrochloride of cocaine, gr. $\frac{3}{4}$.
Porphyryzed iodoform, gr. 1 $\frac{1}{2}$.

M. Sig. Hot applications and sprays of weak carbolyzed water, once or twice daily, may be used in addition.—*N. Y. Med. Jour.*

ALOPECIA AREATA.—

- R Hydrargyri chlor. corrosiv., i.
Glycerini, 15.
Aq. coloniensi., 500.

M. Sig. Apply twice daily.—*Sprangenthal, Med. Rec.*

A POWDER FOR CONDYLOMATA.—The *Riforma medica* gives the following formula:

- R Calomel, parts xxx.
Boric acid, parts xv.
Salicylic acid, parts 5.

M. Sig. To be applied t. i. d.—*N. Y. Med. Jour.*

ACNE.—In a severe case of acne associated with rosacea: Wash the face in hot water as hot as can be borne. Drink a cupful of hot water upon retiring and rising.

Take internally:

℞ Liq. potassi arsenitis,
Tinct. nucis vomicæ, aa gtt. 72.
Aloini, gtt. 2.
Aq. menthæ pip., q. s. ad fl. ℥ 3.

M. Sig. Teaspoonful t. i. d.

Apply externally:

℞ Acidi borici, ℥ j.
Lanolini, 3 ij.
Ol. eucalyptol, gtt. v.
Ungt. zinci oxidi, ℥ j.
Bismuthi subnit., 3 j.

M. Sig. Ft. ungt.—*Shoemaker.*

℞ Liq. potassæ, fl. 3 j.
Aq. rosæ, fl. ℥ iv.

M. Sig. Apply with sponge twice daily.—*Bartholow.*

℞ Hydrarg. oxidi rubri,
Hydrarg. ammon., aa gr. v.
Adipis, ℥ j.

M. Sig. Apply night and morning. (*In obstinate cases.*)—*Fox.*

℞ Sulphuris iodid, 3 ss.
Adipis, ℥ j.

M. Sig. Apply freely night and morning.—*Ringer, Dominion Med. Mon.*

DIURETIC IN CARDIAC DROPSY.—When the liver is enlarged and ascites is a marked feature:

℞ Pulv. digitalis,
Pulv. scillæ, aa gr. xij.
Hydrarg. mass, gr. xxiv.
Ext. belladonnæ, gr. ss.

M. et ft. pil. No. xij. Sig. One every three or four hours.—*Anders.*

Or:

℞ Hydrarg. chlor. mite, gr. ʒ.
Sodii bicarb., gr. 2.

M. (Tablettriturate.) Sig. One every half hour, until twenty are taken, followed by diuretic of digitalis and nephritica.—*Norbury, Med. Fortnightly.*

ATROPIN IN BRONCHIAL ASTHMA.—Von Noorden recommended Trousseau's method of treating asthma, *e. g.*, by atropin (*Jour. of Med. and Science*). The treatment lasts from four to six weeks, commencing with half a milligram per dose, increasing every two or three days by half a milligram, until a dose of four milligrams has been reached. After hav-

ing reached this amount the dose is again gradually diminished. If the dose is increased so gradually no injurious by-effects will be noticed, but nevertheless the patient must be under the physician's supervision. On the attack itself, the atropin has no effect, but it prevents further attacks for a long time. Where no permanent cure is achieved by the atropin there is at least a long-lasting improvement; provided the asthma is not complicated by emphysema and chronic bronchitis.—*Jour. American Med. Asso.*

ACUTE GASTRITIS.—For the vomiting of acute gastritis, Pepper frequently prescribed one of the following formulæ:

℞ Hydrarg. chor. mit., gr. j.

Bismuth subnitrat., gr. xxxvj.

M. et ft. powders No. xij. Sig. Take one powder dry upon the tongue every three hours until four or five have been taken.

℞ Acid carbol., gtt. iv.

Sodi bicarb., 3 iss.

Elix. aurant., ℥ ss.

Aq., q. s. ad ℥ iv.

M. Sig. A teaspoonful every three hours.—*Jour. American Med. Asso.*

INCONTINENCE OF URINE.—There is a certain form of incontinence of the urine, most often seen in elderly or nervous females, in which there is a frequent desire to pass water, or the patient cannot hold it long, or it gushes away in the act of coughing, sneezing or laughing. In all these cases the incontinence is due to want of power in the vesical sphincter. In such cases the tincture of cantharides is the proper remedy, but it should be given in small doses—one minim well diluted three or four times daily, or put half a dram in four ounces of water and give a teaspoonful every hour or two.—*Jour. of Medicine and Science.*

DIURETICS, A SUBSTITUTE FOR BASHAM'S MIXTURE.—

℞ Tinct. ferri chloridi,
Potass. acetatis, aa 3 iv.
Syr. simp.,
Aq., aa ℥ ij.

M. Sig. Two or three teaspoonfuls four times a day.—*Med. Rec.*

CLINICAL OBSERVATIONS ON DELIRIUM TREMENS AND SIMILAR DISEASES, AND THE TREATMENT OF THE SAME BY CEREBRO-EXCITANTS.—As a result of his numerous observations, Dr. R. Trewine (*Wratch*) has become convinced that in delirium tremens, dementia senilis, and in post-typhoidal paranoia and hallucinaria acuta, cerebro-excitants are indicated rather than sedative drugs. He therefore tested the use of atropine in doses of 0.0006 to 0.0009 hypodermatically, in these cases. In all cases the result was good; a quiet sleep always occurred after the injection. The same was true also, but to a less degree, of the use of cold douches, diuretin and alcohol.—*Med. Rec.*

BROMIDROSIS.—

℞ Ext. belladonnæ radices fluidi, m xxiv.

Sacchari lactis, gr. xxxvj.

Alcohol, q. s.

M. et ft. tabellæ triturationes No. xxiv. Sig. One or two tablets two hours after meals. *Indication:* Used to control sweating.

℞ Formaldehydi (40 per cent. sol.), fl. ʒ ij.

Sig. Fifteen drops to the quart of water as bath for body or feet. Do not get into eyes. *Indication:* Antiseptic to prevent fetor.

℞ Ext. geranii fluidi, fl. ʒ viij.

Sig. Apply after bath. *Indication:* Used to control sweating.

℞ Ext. geranii mac. fluidi, fl. ʒ ij.

Sig. Use externally.—*Pepper, Dominion Med. Mon.*

TANG-KIN IN AMENORRHŒA AND DYSMENORRHŒA.—Hirth (*Münchener medicinische Wochenschrift, Medical and Surgical Review of Reviews*) says that the root of tang-kin, also known as kan-kin, schan-ki, and wön-wu (man-mo), has been used with good results by the Chinese for centuries in case of abnormal menstruation, especially amenorrhœa. The writer obtained a large supply in Chung-king, in Western China, in May, 1895, and brought it to Europe. It was examined pharmacologically by Heinz, of Munich, who found the extract non-poisonous, and not an abortifacient. Müller has given the drug an extended trial in cases of amenorrhœa and dysmenorrhœa,

with favorable results. The writer believes that in this drug a valuable remedy will be found for the disturbances of menstruation. Extractum radices tang-kin has now been placed on the market under the name of "emuenol" (eumenol?).—*N. Y. Med. Jour.*

ENTERO-COLITIS.—

℞ Bismuth subgallat, gr. xxiv-xxxvj.

Pulv. opii, gr. ss.

Pulv. pepsini, gr. vj or xij.

Tr. in pulv. No. xij. Sig. One every four hours, alternating with the following:

℞ Hydrarg. chlorid. mitis., gr. ss. Cerii oxalat., gr. ij.

Sacch. alb., q. s.

Tr. in pulv. No. xij. Sig. One every four hours.—*Stengel, North Carolina Med. Jour.*

INFANTILE DIARRHŒA.—The following is a very desirable combination for many cases of infantile diarrhœa:

℞ Bismuth subgal., 3 j.

Sodii bicarb., gr. v.

Cret. prep., 3 ss.

Creosoti, m v.

Spir. cinnam., ʒ ss.

Aq. dest., q. s. ad ʒ iv.

M. Sig. Teaspoonful after each movement.—*Gaillard's Med. Jour.*

BLEPHARITIS.—

℞ Bals. peruviani, 2.

Lanolin anhydr., 6.

Or:

℞ Bals. peruviani, 2.

Lanolini, 4.

Ol. amygd. dulc., 2.

M. Sig. Apply twice daily.—*Klin. Monatsbl. f. Augenheilk.*

CHORDEE.—

℞ Potassii bromidi., 10-20.

Ext. cannab. indic., 0.5-1.

M. ft. pulv. Div. in dos. æq. No. x. Sig. One powder in water before retiring.—*Neumann, Ex.*

DANDRUFF.—

℞ Resorcin, 3 ij.

Alcohol,

Glycerin, aa ʒ ss

Aq. rosæ, ʒ iv.

M. Sig. Apply to scalp.—*Columbus Med. Jour.*

EFFECT OF QUININ ON ASTHMATIC ATTACKS.—Van Sweringen (*Indiana Med. Jour.*) tried many remedies for an attack of bronchial asthma lasting two weeks, but at no time succeeded in getting more than two hours' freedom from distress. Amyl nitrite gave the patient fifteen minutes' ease; chloroform but little longer, after the inhalations stopped. Belladonna seemed to have lost its effect for good entirely. Morphin did better than anything else, and gave her longer relief, but was followed by so much nausea and vomiting that she refused to have it again. Iodids had been given regularly from the first. Then for the purpose of stimulating the inhibitory reflex center, quinin and strychnin were tried. The effect was almost magical. The dose of the quinin was 7 grains, and the extract of nux vomica was given in $\frac{3}{4}$ -grain doses, and to this was added $\frac{1}{4}$ grain of the sulphate of codein. They were taken *pro re nata*. In the intervals the iodids were continued, and the patient had less asthma in the last year than in ten years previous.—*Jour. Amer. Med. Asso.*

BRONCHITIS.—

℞ Tinct. belladonnæ foliorum, fl. 3 ss.

Acidi hydrocyanici diluti, *m* xxiv.

Syr. ipecacuanhæ,

Spir. chloroformi, aa fl. 3 ij.

Potassi citratis, 3 ij.

Syr. lactucarii, fl. 3 j.

Aq., q. s. ad fl. 3 iij.

M. Sig. Teaspoonful in water every two hours. *Indication:* Used in early stage with excessive cough.

℞ Hydrargyri chloridi mitis, gr. j.

Sacchari lactis, gr. x.

Alcohol, q. s.

M. et ft. tabellæ triturationes No. vi. Sig. One tablet every hour. *Indication:* Initial treatment in early stage.—*Dominion Med. Mon.*

CALOMEL IN THE TREATMENT OF CONJUNCTIVITIS.—M. Poukaloff (*Presse médicale; Medicine*) thinks that calomel will meet the same indications as nitrate of silver in ophthalmia neonatorum, for which the latter drug is considered almost a specific, and that it has not the

same inconveniences. The conjunctivæ should be carefully cleansed with a solution of boric acid and then dried with tampons of cotton, and the calomel carefully dusted over the mucous membrane in a thin layer. The method is applicable among the poor, as it requires to be repeated but once a day, and in the vast majority of cases is followed by a prompt amelioration of the symptoms, the duration of many of the cases not exceeding seven days; and even in those that were chronic and severe, recovery has been noted in fifteen days. The author's observations are based upon fifty-seven cases of ophthalmia in which gonococci were noted in the discharge.—*N. Y. Med. Jour.*

AMMONIUM CHLORIDE AND CODEINE.

℞ Ammonium chloride, ʒ4.

Codeine, gr. vj.

Chloroform, *m* xxv.

Comp. mixture glycyrrhiza, q. s. to make, fl. 3 iij.

Teaspoonful every two or three hours.

This mixture is one of the type frequently prescribed by physicians in the treatment of coughs. Codeine with ammonium chloride liberates free ammonia. To compound the prescription, dissolve the codeine in a little alcohol and add the chloroform. Add this solution to about two ounces of the compound mixture of glycyrrhiza, in which dissolve the ammonium chloride by trituration in a mortar; then add the remainder of the brown mixture. A shake label should be attached to the bottle when the bottle is sent out.—*Ex.*

INFANTILE CONVULSIONS.—The *Revue médicale* gives the following formula:

℞ Tinct. colchicum, *m* 120.

Syr. rhubarb, *m* 900.

Pure gum arabic, gr. 900.

Aq., *m* 3,750.

M. Sig. A teaspoonful every two hours.—*N. Y. Med. Jour.*

CHRONIC DYSPEPSIA.—

℞ Argent. nitratis,

Ext. hyoscyami, gr. x.

M. et ft. pil. No. xxx. Sig. Take one pill an hour before meals.—*Med. Stand.*

THE PRESCRIPTION

Therapeutic Cullings.

APPLICATIONS FOR PRURITUS.—The *Progrès médical* credits the following formulæ to R. Bonnier:

1.

- ℞ Gelatin, parts 150.
Purified gelatin (*grénétine*), parts 100.
Gum arabic, parts 5.
Glycerin,
Boiled water, aa parts 300.
Zinc oxide, parts 100.
Phenosalyl, parts 2.

M. Apply warm.

2.

- ℞ Gum dammar,
Anhydrous lanolin, aa parts 50.
Yellow wax, parts 30.
Ichthyol, parts 20.
Powdered iris, parts 30.
Solution of rubber (solvent not specified) parts 200.

M. Incorporate the ichthyol with the lanolin with the aid of heat.—*N. Y. Med. Jour.*

GONORRHEAL ORCHITIS BY SALICYLATE OF METHYL.—Paul Cazrot (*Gaz. Hebdom. de Méd. et Chirurg.*) says that in some cases of gonorrheal orchitis an abundant effusion into the tunica vaginalis comparable to a joint distended with fluid suggested the use of salicylate of methyl. He had repeatedly proved its value in acute rheumatism as an antipyretic, analgesic, and modifier of the synovial tissue. The following is the method of treatment. The patient keeps his bed. The scrotum and penis are supported on a piece of cardboard lined with wadding. Three times a day twenty drops of salicylate of methyl are allowed to fall on the scrotum covering the affected testicle. An impermeable covering is applied and some elastic layers of

cotton. A slight burning sensation is produced. In three cases, in which this treatment was followed, the temperature fell, sleep was secured, and the effusion into the tunica vaginalis was much reduced. The hard epididymis could then be felt overhanging the testicle. The treatment was continued, and the epididymis was much reduced. In six days all acute symptoms had disappeared.—*Med. and Surg. Review of Reviews.*

NERVOUS SYMPTOMS.—Dr. Stengel (*Medical Monograph*), recommends irrigation of the bowel and tepid baths with small doses of opium to allay nervous symptoms. He suggests the following:

- ℞ Bismuth subgallat, gr. xxix-xxxvj.
Pulv. opii, gr. ss.
Pepsini, gr. vi-xij.

M. Div. in pulv. No. xij. Sig. One every four hours, alternating with the following:

- ℞ Hydrarg. chloridi mite, gr. ss.
Cerii oxalat., gr. ij.
Sacch. alb., q. s.

M. Div. in pulv. No. xij. Sig. One every hour.—*Ex.*

CHRONIC URETHRITIS.—

- ℞ Sulph. hydrastizæ, gr. xx.
Listerine, ʒ j.
Solution morphia (Magendie's) ʒ v.
Aquæ, q. s. ad ʒ viij.

M. Sig. Inject three or four times daily, and retain in urethra three to five minutes.—*Ex.*

LUPUS ERYTHEMATOSUS.—The *Progrès médical* attributes the following application to Brocq:

- ℞ Salicylic acid, gr. 15.
Pyrogallic acid, gr. 45.
Flexile collodion, gr. 600.
M.—*N. Y. Med. Jour.*

MYALGIA.—This affection is unusually trivial as to duration and consequences, but often is such a source of discomfort to the patient that a ready remedy is a definite addition to the physicians armamentarium.

℞ Ext. cimicifuga fl.,
Ext. erythroxylon fl.,
Tr. guaiac. ammon., aa fl 3 j.

M. Sig. A teaspoonful three times a day.—*Jour. American Med. Asso.*

INFANTILE CONVULSIONS: THEIR CAUSE, NATURE AND TREATMENT.—Dr. C. G. Slagle, of Minneapolis, read this paper. He expressed the belief that in some children there existed what might be termed "a convulsive tendency." He mentioned many of the numerous causes of eclampsia in children and made some broad classifications. While he would not say that dentition had no influence in the production of convulsions, he asserted that he could hardly recall a case in which it had seemed to him that such a relation had existed. In probably fifty per cent. of all cases the cause was to be found in improper diet.

Dr. A. C. Cotton, of Chicago, said that while naturally one did not look for many dietetic errors in infants fed at the breast, his observations in this direction had convinced him that the breast milk was liable to sudden and great fluctuations in quality as well as in quantity. Some of these observations he had presented last year to the Section in a paper. He thought there was good reason to believe that unusual or excessive coitus was responsible, not infrequently, for marked changes in the lacteal secretion, and for convulsions in the infant.

Dr. Kimball praised gelsemium as an efficient remedy for controlling the convulsion.

Dr. Ewing, of Salt Lake City, said that, in his experience, adherent prepuce had seemed to be the cause of convulsions in a good many children, and for this reason he now made it a rule to examine for this condition in all cases of convulsions that he saw in boys.

Dr. Foster, of Illinois, said that while the exact pathology of convulsions was not well understood, he

personally believed that the nerve cells were in a state of depression, and consequently he did not approve of the administration of remedies of a depressing nature.

Dr. Slagle, in closing the discussion, stated that there was nothing better for controlling the spasm than the inhalation of chloroform. If the history pointed to acute indigestion as the cause of the convulsion, and it was probable that the offending food was still in the stomach, an emetic should be given. A saline enema was a useful adjunct to the general treatment. He recognized adherent prepuce as a contributing, but not an exciting cause.—*Medical Review of Reviews.*

POST-PARTUM HEMORRHAGE DUE TO UTERINE ATONY.—

℞ Quinin. sulphatis, 2.5.
Ergotin, 1.25.

Strychnin. sulphat., 0.03.

M. ft. pil. No. xx. Sig. One pill t. i. d.—*Palmer, Medical Record.*

CHRONIC PHARYNGITIS AND TONSILLITIS.—If the case is severe apply nitrate of silver freely (either the mitigated pencil or a strong solution), then have the patient to mop the inflamed area freely one or more times a day with the following:

℞ Tannic acid, gr. xv.
Glycerin, ʒ j.
Aqua dest., ʒ iiij.

This treatment has rarely failed to effect a cure in my hands.—*Med. Sum.*

CHRONIC CONSTIPATION IN CHILDREN.—

℞ Podophyllotoxin, gr. ʒ.
Spir. vini rectific, m 20.
Syr. rubi idæi, ad ʒ i.

M. Sig. One teaspoonful once or twice daily for a child three years old.—*Baginsky, Med. Rec.*

IRON AND CASCARA IN THE TREATMENT OF CHLOROSIS.—The *Riforma Medica* gives Liégeois's formula as follows:

℞ Iron sulphate, gr. 75.
Sugar of milk, gr. 225.
Powd. cascara sagrada, gr. 375.

M. Divide into a hundred powders. One to be taken after each meal.—*N. Y. Med. Jour.*

ENURESIS NOCTURNA.—

℞ Sodii benzoatis,
Sodii salicyl., aa gr. xx.
Ext. belladonnæ, gr. x.
Aq. cinnamomi, ad ℥ iv.

M. Sig. One teaspoonful every four or five hours. For a child four to six years old.

Or:

℞ Ext. rhois aromat. liq.,
Elix. simplicis, aa 10.
Aq. dest., 60.

M. Sig. 3 j t. i. d. For a child six years old.—*Freyberger, Med. Rec.*

NASAL HYDRORRHEA.—M. Lermoyez (*Progrès médical*) recommends that during the first week the patient should take daily about one two hundred and sixtieth of a grain of sulphate of atropine and a thirty-fifth of a grain of sulphate of strychnine. During the following week this dose may be doubled, and, says the author, even tripled in the third week. A cessation for ten days is then counseled, after which the course may be renewed.—*N. Y. Med. Jour.*

SYPHILIS.—In *Dunglison's College and Clinical Record* Dr. J. D. Ribiero, of Rio Janiero, Brazil, presents the following formula:

℞ Arsenii iodidi,
Hydrargyri chloridi corros.,
Auri et sodii chloridi, aa 0.10.
Ext. sarsaparillæ,
Ext. gentianæ, aa 2.0.
Ext. opti, 0.2.

Ft. massa et pilulæ xxx div. Sig. Two daily, morning and evening, in the inveterate form of syphilis.—*Med. Bull.*

SOLUBLE METALLIC MERCURY IN SYPHILIS.—From an experience of eighty two cases of syphilis in various stages, all promptly and thoroughly cured with inunctions of the new soluble preparation of mercury—similar to Credé's soluble metallic silver—O. Werler recommends it as the easiest, simplest and most effective means of curing all syphilitic processes, in a communication in the *Derm. Zift.* Very much less of the mercury is required than in any other form. It is more rapid, non-toxic, non-irritating and an improvement in every respect over other methods of mercurial treatment,

internal or external, according to his experience. The formula for the salve is:

℞ Hydrargyri colloidalis, ℥ 2½.
Aquæ destil., 3 2½.
Adipis suilli et caræ albæ (4-1)
3 18¾.
Ether sulph., gr. 22½.
Ether benzoati, gr. 52½.

Jour. American Med. Asso.

DIABETES MELLITUS.—In a paper in the *Virginia Medical Semi-Monthly* Dr. J. M. Allen, of Liberty, Mo., says:

"Another combination of remedies which I have recently used with apparent benefit is as follows:

℞ Creosote, gtt. ½.
Tinct. nux vom., gtt. 10.
Saw-palmetto, 3 i.

M. In the saw-palmetto we have something of a tonic as well as a stimulant to the mucous membrane, thereby lessening retrograde metamorphosis of this tissue."—*Med. Bull.*

COCAINIZED MENTHOPHENOL IN OTOLARYNGOLOGY.—M. Bonain, of Brest, who published a year ago his first experience of anæsthesia of the tympanum by means of a new local anæsthetic, cocainized menthophenol, has completed and extended his observations to operations upon the nasal fossæ, pharynx and larynx. The results obtained were conclusive, and the new anæsthetic is of signal value, especially in operations upon the ear. Two formulæ were employed. One was simply anæsthetic, the other was both anæsthetic and caustic.—*Revue Hebdomadaire de Laryngologie, etc.*

ACUTE TONSILLITIS IN CHILDREN.—

℞ Tinct. aconiti, i.
Liq. ammon. citrat., 30.
Syr. aurant, 20.
Aq. dest., q. s. ad 120.

M. Sig. Two teaspoonfuls every three hours.—*Ashby, Med. Rec.*

NEPHRITIS.—A formula of Huchard's is:

℞ Tinct. grindel. robust., ℥ i.
Tinct. convallar. majal., 3 2½.
Tinct. scillæ, 3 1¼.

M. Sig. Fifteen drops t. i. d.—*Le Progrès Médical.*

ERYSIPELAS.—

- R Tinct. aconiti, 3 ss.
 Ext. gelsemii fl., 3 ij.
 Chloroformi,
 Aq. ammonii, aa 3 j.
 Ext. belladon. fl., 3 ss.
 Tinct. saponis comp., 3 ss.

M. Sig. Apply with a camel's hair pencil three or four times daily to the inflamed surface.—*Hill, Jr., Med. Rec.*

PRESERVATION OF SOLUTIONS OF COCAIN.—Jonas, of Brussels, has experimented with solutions of cocain in distilled water, with and without the addition of various preservative agents such as boric acid, glycerin, carbolic acid, etc., in different strengths. He finds the following solutions to remain permanently clear and unchanged:

1.

- R Cocain hydrochlor., gr. iv.
 Ac. carbolibi cryst, gr. j-vj.
 Aq. dest., 3 iiss.

M.

2.

- R Cocain hydrochlor., gr. iv.
 Ac. salicylici, gr. j-vj.
 Aq. dest., 3 iiss.

Med. News.

A NEW TÆNIAFUGE.—Lauren, recognizing *Aspidium spinulosum* as a plant nearly akin to the male fern, undertook to ascertain whether it possessed analogous anthelmintic virtues. In Finland, where the author is located, the plant is very common, and tape-worm abounds. The conditions for investigation were, therefore, to hand. Having himself gathered the rhizomes of the plant, Lauren prepared a 10 per cent. ethereal extract, which occurs in the form of a not very thick, greenish-brown liquid. The author—being afflicted with a solitary worm—began to experiment upon himself, taking 4 grammes (about 1 drachm) of the extract in capsules. An hour and a half after he had taken the medicine he passed a bothriocephalus eight metres (eight and three-fourths yards) long, with its head. Continued experience gave the same results, the remedy always being used in the dose of 4 grammes. In no case did any patient complain of the least secondary disturbance. The

author strongly recommends this extract as having an equal if not superior effect to *Filix mas*. It is more easily procured, as *Aspidium spinulosum* is common in many countries. *Giornale Internaz. delle Scienze Mediche.*

ACUTE TONSILLITIS.—

- R Salol, 3 j.
 Ol. amygd. dulc.,
 Pulv. acac., aa 3 ij.
 Syr. simp., 3 iss.
 Aq. dest., 3 ij.
 Ess. menth. pip., q. s.

M. Sig. Tablespoonful every two hours.—*Le Progrès Médical.*

NASAL CATARRH.—

- R Sodii bicarb.,
 Sodii biborat., aa 3 ss.
 Glycerini, 3 ij.
 Listerini, 3 j.
 Aq., 3 iij.

This is a modification of Dobell's solution, and, when slightly warmed and used as a spray, is excellent for cleansing and disinfecting the nasal cavities.—*Stucky, Med. Rec.*

GERMAN SPECIFIC AGAINST SEASICKNESS.—Bright red spectacles, accompanied by the internal use of calomel, furnish a new German specific against seasickness. Seasickness is due to a lack of blood in the brain, while (according to Epstein's investigations) the effect of red is to send blood to this organ. By looking at one point for some time through red glasses the patient is cured.—*Med. Rec.*

CARDIAC DROPSY IN CHILDREN.—

- R Potass. iodidi, 2.
 Tinct. scillæ, 10.
 Tinct. strophanthi,
 Spir. chloroformi, aa 5.
 Infus. senegæ, 240.

M. Sig. One tablespoonful t. i. d. For a child eight to twelve years old. *Ashby, Med. Rec.*

AN ANÆSTHETIC ARSENICAL CAUSTIC.—The *Journal des Practiciens* gives Pouchet's formula as follows:

- R Arsenous acid,
 Orthoform, aa part 1.
 Alcohol,
 Aq. dest., aa parts 40-75.
 M.—*N. Y. Med. Jour.*

GONORRHEA.—The following formula for a pomade to be used as an injection is credited to Finger by *Le Progrès Médical*:

- ℞ Potass. iodid., 3 i℥.
Iodi., gr. 15.
Lanolin, ℥ 3.
Ol. olivæ, 3 i℥.

Med. Bull.

RACHITIS.—

- ℞ Spir. of phosphorus, ℥ iij + 3 vi.
Ol. of star anise, m xvj.
Glycerin, ℥ ix.

Aromatic elixir, q. s. ad ℥ xvj.

Each fluid drachm contains $\frac{1}{10}$ of a grain of phosphorus. This is the elixir of phosphorus, devised by Dr. Charles Rice, head of the drug department of Bellevue Hospital, New York City. Children one year old can take $\frac{1}{10}$ of a grain of phosphorus three times a day with no bad results, and in older children $\frac{1}{10}$ of a grain can be given with great benefit.—*Med. Rec.*

INFANTILE DIARRHEA.—In the serious variety Dr. Bucknum, of Denver, has learned to rely greatly upon the following:

- ℞ Acid. salicylic, 3 ss.
Cretæ precip., gr. x.
Syr. zingiberis, fl. 3 iv.
Aq. dest., q. s. ad fl. ℥ iij.

M. Sig. A teaspoonful every hour until the bowels are under control.—*Colorado Med. Jour.*

PREVENTION OF HAY FEVER.—Many hay fever cases have enlarged turbinals, spurs or ridges on the septum, polyps, etc. In the treatment of the hay fever, the first step should be to "put the nose in good order." Surgical means should be employed to render nasal respiration possible. At this stage of the treatment and in the numerous hay fever sufferers whose nasal passages are patulous except during the hay fever season, preventive treatment will generally avert the disease and keep the patient in a condition of comfort. The nasal passages should be sterilized by means of hydrozone in 10 per cent. solution in water, gradually increasing the strength to a 25 per cent. solution. This may be applied by means of the atomizer or douche, and should be used four to six times

daily, beginning about two weeks before the onset of the disease is expected.

If the attack is not entirely averted, in addition to the hydrozone solution use:

- ℞ Antipyrine, gr. x.
Menthol, gr. iij.
Alphosol, ℥ iss.
4 per cent. solution of Eucaine
B, ℥ iij.

Spray the nose and post-nasal space thoroughly after using the hydrozone.

Thoroughness of application counts for much in the treatment of all nasal affections, and particularly is this the case in hay fever.—*Ex.*

INTESTINAL WORMS.—

- ℞ Sulphate of pelletierine, gr. iij.
Tannin, gr. xv.
Aq. dest. and syr. simp., ℥ iij.
Ess. of orange, gtt. x.

M. Sig. This is to be taken in two doses at half-hour intervals. Follow this by a large draught of Hunyadi water.—*Lyon, Med. Rec.*

SMALLPOX.—In treating many smallpox patients, Dr. Th. Faure, surgeon to the hospital at Chaux-de-Fonds, Switzerland, has found that frequent applications to the eruptions of the following iodoform collodion prevent any trace of pitting:

- ℞ Iodoform, gr. xxx.
Collodion, ℥ j.

Times and Register.

A MIXTURE FOR INCONTINENCE OF URINE AND OF FÆCES IN GENERAL PARALYSIS.—M. Athanassio (*Indépendance médicale*) recommends the following:

- ℞ Tartrate of iron and potassium,
gr. 15.
Tincture of nux vomica, gtt.
15–20.
Decoction of rhatany,
Decoction of cinchona, aa gr.
1,500.

M. The mixture to be taken a soup- spoonful at a time in the course of forty-eight hours.—*N. Y. Med. Jour.*

TO DISGUISE COD LIVER OIL.—

- ℞ Ol. morrhue, 150.
Ol. eucalypti ether, gtt. 2.

Duquesnel, Med. Rec.

NEURASTHENIC HEADACHES.—Dr. Joseph Collins states that in neurasthenic headaches, associated with low vascular tension, caffein, either alone or in combination, gives excellent results. The following formula he has found particularly useful:

R Caffein citrate, gr. v.
Sodium bromid.,
Sodium bicarbonate,
Pulv. tartaric acid, aa gr. x.

M. Make into one powder. Sig. Take in water while effervescing.

Or:

R Caffein salicylate, gr. j.
Ammonium salicylate,
Phenol salicylate, aa gr. v.

M. Make one capsule. Sig. One capsule every three to four hours.

Or:

R Caffein, gr. ss-iss.
Phenacetin, gr. v.

M. Make one capsule. Sig. Take with hot water and repeat in one hour.—*Med. News.*

TO LESSEN THE DANGERS OF COCAINE INJECTIONS.—

R Resorcin, grm. 10.
Cocainæ hydrochl, grm. 20.
Aq. dest., grm. 100.

M. The resorcin diminishes the toxic effect, increases anæsthetic action, and prevents crystallizing of the cocaine.—*Hall, Ex.*

STRYCHNINE IN OPIUM POISONING. Dr. R. D. Pennefather (*British Medical Journal*) was called at 7:30 P. M. on May 5th to see a stout lady aged about thirty-eight years. She was in a comatose state—the pulse at the wrist was imperceptible, the heart sounds were extremely faint, respiration gasping, about six to the minute, the pupils pinhole, the skin moist and warm. She had gone to bed at 3 P. M., having been nursing a friend for the previous sixty hours, during which time she had had no sleep and scarcely any nourishment. Dr. Pennefather found beside the bed an empty glass smelling of opium. Having tried in vain to rouse her by flicking with a wet towel and vigorous friction to the limbs, he gave her a fiftieth of a grain of strychnine hypodermically. Almost immediately the muscles of the face and arm twitched, then she opened her eyes, and when sufficient-

ly aroused to swallow she was given a pint of strong coffee. There was some difficulty in keeping her awake for a couple of hours. She made a rapid recovery and admitted having taken fifty minims of laudanum, as she had frequently done before. She may not have taken more, but on account of the exhaustion, the opium might have taken much greater effect. Dr. Pennefather considers this case to show what an invaluable agent strychnine is in such cases.—*North American Medical Journal.*

INFANTILE CONVULSIONS.—M. Jules Simon recommends the following line of treatment of infantile convulsions:

1. Empty the digestive tract by an enema, and by tickling the fauces to promote vomiting.

2. If the attack continues, administer ether or chloroform on a handkerchief.

3. Administer by the mouth, or if necessary by enemata, repeated doses of the following mixture: Chloral hydrate, fifteen grains; bromide of potassium, fifteen grains; syrup of codeine, ten drops; tincture of musk, ten drops; tincture of aconite, ten drops; orange-flower water, three ounces and a half—this quantity to suffice for twenty-four hours.

4. When the attack is very grave, give a warm bath and apply a blister to the back of the neck or the epigastrium, leaving it on for three hours. Antiseptic precautions should be observed and a poultice subsequently applied.—*Indian Lancet.*

SUBACUTE INTESTINAL CATARRHS IN INFANTS.—Among the remedies employed, the following combination is highly recommended by Dr. Hock (*Charlotte Med. Jour.*):

R Tannigen, gr. 30.
Sacchar. lact., gr. 45.

Div. in chart, No. 10. Sig. One-half powder every four hours.—*Ex.*

PILULÆ ANTISCROFULOSÆ.—

R Ferri arseniat., 0.10.
Ext. conii,
Ext. juglandis fol.,
Iodoformi, aa 0.12.

M. Ft. pil. 24. Sig. Three daily. *Ribiero, Dunglison's College and Clinical Record.*

PILES.—With proper attention to the condition of the bowels and portal circulation I have known the following preparation to cure cases so severe that it at first seemed impossible to give them any relief without an operation:

℞ Aq. ext. plantago cordata,
" " witch-hazel, aa gr.
180.

Aq. dest., q. s.

Place in a suitable vessel over a water-bath and stir until softened, then add:

℞ Morphine sulph., gr. 10.
Glycerite boro glyceride (50 per cent.) ℥ 2.

Evaporate until the quantity is reduced to two fluid ounces, and put into a wide-mouthed bottle or jar.

I have had to make the extract of plantain myself from the fresh herb, as I could not find it in the market, and it does not keep well.

It can be used as an ointment or diluted and used as an injection.—*The Med. Summary.*

TREATMENT OF LARGE TONSILS BY INTERNAL MASSAGE.—Kantorowicz. (*Deuts. med. Zeit.*) Introduce the index finger as far back as possible behind the tonsil, then make from fifteen to twenty circular movements around the tonsil and then the same number from top to bottom. These movements have as their object the emptying of the lymphatic spaces. After three or four movements the patient is allowed to rest a few moments, and the duration of the entire treatment should last but a short time. The tonsils should be pressed on rather hard, because it causes less irritation. The disagreeable sensations felt by the patient gradually disappear. The author has seen tonsils very large and red diminish in volume by the end of fourteen sittings, so that their surfaces did not protrude beyond the anterior margin of the pillars. To prevent his being bitten the author inserts a piece of rubber in preference to a metallic gag, which would interfere with the free movement of the finger. In conclusion, the following figures are given as to the relation of caries in the teeth to enlarged tonsils. In 75 cases of tonsils bilaterally enlarged there were

296 teeth with cavities, and in 24 cases of tonsils enlarged on one side only, there were cavities in 101 teeth. Without basing a theory on these figures the author asks, "If more care were given to the teeth would there not be fewer cases of enlarged tonsils?"—*Review of Med. and Surg. Progress.*

RECTAL ABSCESSSES.—Dr. Hearn states that rectal abscesses often yield to the following treatment where other applications fail:

℞ Iodoformi, gr. 2.
Bismuthi carbonat., gr. 4.
Morphiæ acetatis, gr. $\frac{1}{10}$.
Olei theobromæ, q. s.

M. Make into one suppository.

Aristol or boric acid may be used instead of the iodoform, if the odor proves offensive.—*Dunglison's College and Clinical Record.*

SEBORRHEA.—

℞ Tinct. cantharidis,
Liq. potassii arsenitis,
Spir. ammoniæ aromatici,
Glycerini, aa ℥ ss.
Aq. rosæ, q. s. ad ℥ vj.

M. Sig. On alternate days use with tar soap.—*Martin, Med. Rec.*

METHYL SALICYLATE IN PRURITIS. In a number of cases the effect has been immediate and absolutely remarkable. It has been found effective in pruritus, prurigo and lichen simplex. The following is the formula:

℞ Methyl salicylate, gr. xxx.
Zinc oxid.,
Vaselin, aa 3 v.

M. Sig. Apply in a thick salve so that it will adhere closely to the skin.—*Lereade, Jour. American Med. Asso.*

PNEUMONIA.—In order to promote renal elimination, Dr. F. M. Hill, of Persia, Ia., says, in the *Med. World*, that his favorite combination is:

℞ Fl. ext. hydrangea,
Spir. ætheris nitrosi, aa ℥ iv.
Salicylic acid, 3 ss.
Fl. ext. gelsemium, 3 ij.
Ess. gaultheria, m xx.
Syr. simp., q. s. ad ℥ xij.

M. Sig. Adult dose, teaspoonful every four to six hours.—*Medical Summary.*

COLIC OF INFANTS.—Dr. P. F. Barbour, in *Pediatrics*, says: In colic the use of warm enemata will usually remove the gas. The enema may be of soap suds and water, or may contain a few drops of turpentine, or half a teaspoonful of glycerin. Hot applications should be made to the abdomen, and the feet and hands be warmed at the fire or by a hot-water bag. Small amounts of hot whiskey and water with a drop of essence of peppermint and a little sodium bicarbonate by the mouth will give relief.

Dr. Larrabee used to recommend one of the following combinations:

R Spir. ammon. aromat., m vj.
Sodium bicarbonatis, gr. xij.
Syr. rhei aromatic, 3 j.
Aq. carui, $\frac{3}{4}$ iss.

M. ft. sol. Sig. Teaspoonful p. r. n.

Or the following:

R Tinct. asafoetida, m xv.
Ol. cajuputi, m ij.
Magnesia carb., 3 ss.
Syr. acacia, $\frac{3}{4}$ ss.
Aq. anise, $\frac{3}{4}$ iss.

M. ft. mist. Sig. Teaspoonful p. r. n.

Some form of cathartic should be administered after relief of the urgent symptoms.

The aromatic antiseptics, when given diluted in hot water, are often of service in relieving the paroxysm and preventing the formation of gas. The most frequent cause of colic is the presence of too much proteid in milk, as is evidenced by the stools containing undigested casein or having the cheesy odor. Therefore, in habitual colic proteids should be diminished.—*Medical Summary*.

TINNITUS AURIUM.—Tinnitus aurium is the subject of a paper by Dr. M. G. Price (*Louisville Jour. of Surg. and Med.*) in which he refers to various forms of the malady that he has met, and says he "speaks as one having authority," because he has had it himself. After reviewing the causes of the trouble, he says that causes are not half so interesting to our patients as treatment. No matter about the deafness; that will be cheerfully borne if we will only stop the noises.

Tincture cimicifuga in maximum doses has helped. The bromides

give good results. Ten grains of ammonium bromide or of the sodium salt after each meal or three doses during the evening is a good prescription. If these fail try silver nitrate.

If the trouble is due to cerebral anemia it may be relieved by glonoin. If the malady is continuous, remember atropine. If there be hyperemic affection, aconitine is the remedy.

In his own case, which was continuous and of several year's standing, with slight deafness, he was most agreeably benefited by:

R Morphine sulphate, gr. $\frac{1}{4}$.
Atropine sulphate, gr. $\frac{1}{100}$.
Caffeine citrate, gr. $\frac{1}{4}$.

Two or three such tablets in the course of the day will cure.

A remedy which has been recommended for rheumatic patients with tinnitus in whom the ear drum is thickened, but which Dr. Price does not mention, is pilocarpine. It has been recommended in the following combination:

R Pilocarpine hydrochlor., gr. ij.
Syr. gaultheria, $\frac{3}{4}$ ij.

Teaspoonful night and morning.—*Ex.*

ACUTE INTESTINAL CATARRH.—Professor Ewald prescribes in obstinate acute intestinal catarrh:

R Resorcin, gr. 75.
Bismuth salicylate,
Tannigen, aa $\frac{3}{4}$ $\frac{1}{2}$.
White sugar,
Sodium carbonate, aa 3 2.

M. ft. pul. Sig. Small teaspoonful every two hours.—*Georgia Med. and Surg. Jour.*

SCABIES.—The *Cronica medica* says that one or two frictions with the following ointment often suffice to effect a cure:

R Naphthaline, part j.
Lanolin, parts ix.
M.—*N. Y. Med. Jour.*

COUGH IN MEASLES.—

R Sweet spir. of nitre, $\frac{3}{4}$ ij.
Muriate of ammonia, $\frac{3}{4}$ ss.
Dover's powder, 3 j.
Simple syr., $\frac{3}{4}$ ij.

M. Sig. Shake well. Dose, a teaspoonful to a tablespoonful.—*Ebert, Med. Rec.*

SOOTHING OINTMENT.—The *Clinica moderna* gives the following formula:

- ℞ Benzoinated lard, parts 40.
Laudanum, parts 4.
Chloroform, parts 3.
Ext. of belladonna, parts 2.
Ext. of cicuta, part 1.
M.—*N. Y. Med. Jour.*

HEADACHE.—In a case of persistent headache, Dr. Vansant demonstrated, at the Philadelphia Polyclinic, the great value of careful inspection of the nasal chambers and the removal of all accumulations or discharges from the sinuses, followed by the local application of heated air, which afforded immediate relief.—*Medical Summary.*

ACUTE RHEUMATISM IN CHILDREN.

- ℞ Sodii salicylatis, 3 iss.
Potassii iodidi, 3 ss.
Tinct. aconiti, gtt. x-xv.
Aq., ʒ ij.
M. Sig. One drachm, t. i. d.—*Caillé, Med. Rec.*

ATROPINE IN SEROUS DIARRHŒA OF NURSINGS.—The *Riforma medica* gives the following:

- ℞ Sulphate of atropine, gr. $\frac{1}{10}$.
Aq. dest., gr. 450.

M. From one to three drops may be given, but the general condition must be closely watched, and three drops must not be exceeded.—*N. Y. Med. Jour.*

ACUTE RHINITIS.—

- ℞ Ol. thymi vulgaris, m v.
Menthol, gr. v.
Ol. petrolati, ʒ ij.

M. Sig. Spray nasal cavity freely, and also administer three grains blennostasin internally every three hours.—*Med. Sum.*

INTERNAL TREATMENT OF LUPUS WITH FLUORIN.—A. Philippson has been testing sodium fluorin in the treatment of lupus since 1895, and now announces that we have in it a most effective means of favorably influencing lupus, applied in a 10 per cent. plaster, but most active taken internally. His report in the *Dermatologische Zeitschrift* of several cases followed for a couple of years, more or less, emphatically

demonstrates the value of this new medication. Unfortunately it causes gastric disturbances in time, requiring suspension of its use before the cure can be completely realized. To obviate this he resorted to an organic preparation—natr. parafluorbenzoi-cum—and found this equally effective, readily taken and free from after-effects. The prompt and marked improvement constantly attained suggests its application to other tuberculous processes. The dose is $7\frac{1}{2}$ grains three times a day.—*Journal American Med. Asso.*

WHOOPIING COUGH.—J. Madison Taylor has found antipyrin of great value in the treatment of whooping-cough. The dose for a child is from $\frac{1}{2}$ to 1 grain every three hours. He employs it as in the following formulas:

- ℞ Antipyrin, gr. ss-j.
Ammon. chlor., gr. iiss-v.
Syr. limonis, 3 ss.
Aq., q. s. ad 3.

Or:

- ℞ Antipyrin, gr. ss-ij.
Ammon. brom., gr. j-ij.
Ammon. mur., gr. v.
Syr., q. s. ad 3 j.

Ex.

VOMITING OF PREGNANCY.—For the vomiting of pregnancy and bilious vomiting the following are given:

- ℞ Acidi carbolic, gr. $\frac{1}{10}$ -4 $\frac{1}{2}$.
Chloroformi, gtt. 5
Syr.,
Aq. dest., aa 3 30.
Tinct. aurantii cort., q. s.

M. Sig. A dessertspoonful every two hours. Some spoonfuls of water should then be administered from time to time.—*Jour. American Med. Asso.*

PERNIO.—

- ℞ Ichthyol, 1.0-5.0.
Resorcin, 1.0-3.0.
Adipis lanæ, 25.0.
Ol. olivæ, 10.0.
Aq. dest., q. s. ad 50.0.

M. Sig. Apply at night, with good rubbing. Before using each day bathe affected part 1 to 3 times (10 to 15 minutes) in hot water, and then with alcohol if not ulcerated).—*Therap. Rev. der Allg. med. Zeits. — New York Medicin. Monatschrift.*

ACUTE RHEUMATISM.—In acute rheumatism Lemoine (*Phil. Med. Jour.*; *Columbus Med. Jour.*) recommends the following as excellent topical applications:

- R Salol, 3 i.
Menthol, gr. 40.
Ether, 3 i.
Lanolin, 3 6¼.
- M.
R Alcohol (85 per cent.), 3 5.
Guaiacol, 3 i.
- M.
R Vaseline, 3 6.
Guaiacol, 3 i.
- M.
R Terpinol,
Alcohol (85 per cent.), aa 3 4.
- M.
R Terpinol,
Alcohol (85 per cent.), aa 3 2½.
Guaiacol, 3 i.
- M.—*Med. Standard.*

MALARIAL TOXEMIA.—The following method of treatment gave me excellent results in a case of malarial toxemia with sallow skin, furred tongue, bitter taste, profuse sweats, cough, pain in right shoulder, also pain and tenderness in right hypochondrium and congestion of the liver:

- R Salol,
Quinine sulph., aa 3 ss.
- M. et div. caps. No. xij. Sig. One every three hours while awake, and the following given night and morning:
- R Pulv. ipecac, gr. iv.
Ext. colocynth comp., gr. xij.
Mass hydrarg., gr. xxiv.
- M. et div. caps. No. xij. Sig. One night and morning.—*Medical Summary.*

SUMMER COMPLAINTS.—The following prescription has been used for some time by a prominent Philadelphia physician, who considers it almost a specific in summer complaints:

- R Liq. bismuthi,
Glycothymoline (Kress), aa 3 ij.
- M. Sig. A teaspoonful as often as may be required.
- Glycothymoline (Kress) may be combined with bismuth, tinct. opii camphorat., tinct. opii, mistura cretæ, syr. rhei aromat., etc. Administered

internally, it acts as a carminative, antiseptic, alterative, stimulant and antacid, and meets many requirements of the physician during the summer months. Diluted one ounce to the quart of water and used as a sponge-bath, it stimulates the skin secretions. An enema of glycothymoline (Kress) one ounce to the pint, will be found most valuable.—*Dun- glison's Col. and Clin. Record.*

PROLAPSE OF THE FUNIS.—Abraham finds the Trendelenburg position decidedly superior to the knee-chest position, and less repulsive to the patient in overcoming prolapse of the umbilical cord. The suggestion, first made by Brothers, has also been found available in the performance of version.—*Med. Rec.*

ERUPTIVE AND SIMPLE FEVERS.—

- R Vini antimonii,
Potassii vel sodii nitratis, aa 3 j.
- Spir. etheris nitrosi, 3 iij.
Liq. morphinæ sulphatis, 3 j.
Syr. acidi citrici, 3 ss.
Liq. potassii citratis, 3 iv.
- M. Sig. Take a tablespoonful every two hours.—*Carson, Ex.*

SENILE PRURITUS.—

- R Potassii bromidi, 3 ij.
Sodii iodidi, 3 j.
Sodii salicylat., 3 ij.
Sodii acetatis, 3 j.
Inf. gentianæ, 3 iv.
- M. Sig. Two teaspoonfuls in water after each meal.—*Lavelle, Revue de Thérap. Médico-Chirurg.*

PERTUSSIS.—

- R Tinct. belladon., 3 ij.
Phenacetin, 3 j.
Brandy, 3 iij.
Fl. ext. chestnut leaves, 3 xij.
- M. Sig. Ten drops every two to six hours for a child one year old; a child ten years old may be given as much as a teaspoonful.—*Lancaster, Med. Rec.*

ARRHYTHMIA CORDIS.—

- R Ferri valerianat.,
Zinci valerianat., aa gr. xxx.
- Strych. sulphat., gr. j.
Pulv. digitalis, gr. viij.
- M. ft. caps. No. xxx. Sig. One after each meal.—*Anders, Med. Rec.*

NERVINE TONIC.—

R Asafœtidæ, 3 j.
 Acidi arseniosi,
 Strychninæ sulphatis, aa gr.
 ss.
 Ext. sumbul, ℥ iss.
 Ferri subcarbonatis, ℥ ij.
 Quininæ valerianatis, ℥ j.

M. Make capsules No. 24. Sig. One capsule after each meal.—*Brown, Ex.*

• ANTIGALACTIC PILULES.—The *Gas. hebdomadaire de méd. et de chir.* gives the following:

R Sodium nitrate, gr. 150.
 Camphor,
 Potassium nitrate,
 Rob of sambucus, aa gr. 60.

M. To make sixty pilules. One to be taken morning and evening. [A rob is "a preparation made from the juice of fruit by evaporating to the consistence of a soft extract, generally with the addition of sugar." "Foster's Encyclopædic Medical Dictionary."]—*N. Y. Med. Jour.*

NIGHT-SWEATS OF PHTHISIS.—Siefert's formula is:

R Agaricin, gr. viiss.
 Dover's powder, 3 ij.
 Powd. marshmallow,
 Mucilage of acacia, aa 3 j.

M. et div. pil. No. 100. Sig. One or two pills in the evening.—*Le Progrès Médical.*

ACUTE RHEUMATISM.—Favill (*Jour. of the Amer. Med. Asso.*), recommends that the bowels be emptied thoroughly, preferable with a mercurial and that sodium salicylate be administered to its full analgesic effect, or, if it is not well borne by the stomach, oil of gaultheria. If salicylates are contraindicated by cerebral conditions, antipyrin, or some other suitable coal-tar analgesic, may be employed; and if these are contraindicated by circulatory or nervous complication, opium may be used for the relief of pain. As the pain is controlled by these means, perhaps together with heat and immobilization, salicylates should be withheld and the system saturated with alkali until the active process seems controlled. Iron should be given simultaneously or subsequently if the condition of the bowels and the liver

permits. Throughout the attack, intestinal hygiene should be promoted by means of a mercurial, cholagogue or saline.—*Ex.*

SYPHILITIC ALOPECIA.—Dr. Gaucher (*Jour. des praticiens*) makes frequent applications to the scalp of the following lotion:

R Corrosive sublimate, gr. 3.
 Chloral hydrate, gr. 60.
 Resorcin, gr. 30.
 Castor ol., gr. 15.
 Alcohol, gr. 3,000.

M. From 375 to 750 grains of tincture of cinchona may be used to replace the same amount of alcohol. But the daily application of quinine is apt to temporarily redden the hair. *N. Y. Med. Jour.*

TREATMENT OF LEUCORRHEA WITH VAGINAL INJECTIONS OF THE YEAST FUNGUS.—Landau (*Deut. med. Woch.*) states that the usual local treatment applied in the cases of leucorrhea give only temporary benefit. With the object of gaining better results in the treatment of these cases he experimented in forty cases of obstinate leucorrhea by injecting into the vagina the yeast fungus. The injections were repeated every two days. The fungus was the *saccharomyces cerevisiæ*. The result of the treatment was very satisfactory, the discharge immediately disappearing, and returned only rarely. Landau believes that through the growth of these non-pathogenic germs in the vagina, the vital conditions necessary for the development of pathogenic bacteria is interfered with and the leucorrhea cured.—*Ex.*

INTESTINAL FERMENTATION WITH CONSTIPATION.—

R Ext. aloes,
 Pulveris rhei, aa gr. vj.
 Benzosol, gr. ix.
 Ext. hyoscyami, gr. vj.

M. ft. caps. No. xii. Sig. One after meals.—*Stuckey, Ex.*

GOITRE.—

R Iodoformi, gr. 15.
 Ætheris, m 80.
 Ol. amygdalæ dulcis, 3 2½.

M. Sig. Twenty to forty minims for injection into the parenchyma of the gland.—*Frey, Med. Rec.*

HEADACHE FROM GENERAL ANEMIA.
To overcome the sluggish condition of the digestive tract, with headaches dependent upon a general anemia:

R Quinine sulph.,
Ext. aloes aq., aa gr. xij.
Pulv. capsici,
Pulv. ipecac, aa gr. vj.
Glycerin, q. s.

M. Ft. pil. No. xij. Sig. One pill at midday.

If associated with considerable vital depression, he uses the following pill instead, giving at the same time some absorbable form of iron:

R Ext. nucis vom., gr. ½.
Pil. rhei comp., gr. 3.
Pulv. capsici, gr. ¼.

M. Ft. pil. Sig. One pill at midday.—*Jour. Amer. Med. Asso.*

ECZEMA.—

R Acidi hydrocyanici diluti, m
40.

Ol. cadini, 3 i.
Saponis viridis, 3 2.
Ol. rosmarini, 3 1½.
Aq. destil., q. s. ad 3 5.

M. et ft. linimentum.—*Anderson, Ex.*

BRONCHO-PNEUMONIA OF MEASLES.
A writer in the *Presse méd. (Lyon méd.)* says that enveloping the chest with napkins soaked in cold water and partly wrung out is the most efficient remedy. As a stimulant, one may use Marfan's mixture, the formula of which is as follows:

R Sodium benzoate, gr. 7½.
Ammonium acetate, gr. 21½.
Old cognac, gr. 120-240.
Gummy julep,
Syr. of tolu, aa gr. 675.

M. Sig. A dessertspoonful every hour or two, according to the child's age.—*N. Y. Med. Jour.*

DYSENTERY.—Dr. Christopher C Cronkhite gives, in the *Med. Rev.*, an interesting account of an epidemic of dysentery in which he had an opportunity of treating twenty-three cases. Owing to the bad hygienic condition prevailing, it was found very difficult to successfully combat the disease. The treatment consisted chiefly in the administration of tannigen in doses of five to ten grammes every three or four hours, according to the age, in connection with the

necessary dietetic regulations. In some cases its use was preceded by small doses of calomel given for the purpose of cleansing the alimentary tract. Under this treatment the fatality in twenty-three cases was only two, and these, the author believes, would have recovered with careful and intelligent nursing.—*Ex.*

ELIXIR OF TERPINE FOR BRONCHITIS.
The *Revue méd.* quoting the *Gaz. hebdomadaire de méd. et de chir.*, attributes the following to Crinon:

R Terpine, gr. 150.
Glycerin,
Alcohol, aa gr. 2,250.
Syr. of honey, gr. 1,875.
Tinct. of vanilla, gr. 150.

M. From two to four tablespoonfuls daily.—*N. Y. Med. Jour.*

ATROPINE AS A REMEDY FOR SEASICKNESS.—The *Jour. de méd. de Paris* credits this formula to F. Rebate:

R Atropine sulphate, gr. 0.045.
Distilled aq., 3 2½.

M. A hypodermic syringe-ful to be given every seven or eight hours. Rebate has seen no accidents from its use. In a number of cases he has been able not only to stop the vomiting, but also to allay the disagreeable sensation in the epigastrium.—*N. Y. Med. Jour.*

MIXTURE VERBINUS COMPOUND.—

R Saccharin, 3 iij.
Fl. ext. orange-peel,
Fl. ext. yerba santa, aa 3 ij.
Fl. ext. ginger, 3 iv.
Aq., ad O iv.

M. Add fifty ounces of MgCO₃; shake; let it stand for twenty-four hours; filter. Color red with fifty ounces of fl. ext. cudbear, if desired.—*Jour. Amer. Med. Asso.*

HEADACHE FROM SLUGGISH CIRCULATION.—

R Ext. cannabis ind., gr. ⅓.
Ext. gentian, q. s.

M. Ft. pil.—*Collins, Jour. Amer. Medical Association.*

TRIGEMINAL NEURALGIA.—

R Ext. cannabis indicæ, gr. 7½.
Acidi salicylici, gr. 76.

M. ft. pulv. No. x. Sig. Three powders daily.—*Hirschkrone, Medical Record.*

CONGESTION OF THE FEMALE GENITAL ORGANS.—

R Magnesi sulph., 45.
 Ferri sulph.,
 Manganes. sulph., aa 10.
 Acidi sulphur. dil., 4.
 Aq. destill., ad 200.

M. Sig. One tablespoonful in a wineglassful of water before meals.—*Med. Rec.*

HEADACHE DEPENDENT UPON OVARIAN DISEASE.—Sinkler's formula is:

R Ammonii bromid., 3vj.
 Ext. hydrastis, fl., ʒ ss.
 Tinct. gentian comp., ʒ iss.
 Aq., ʒ iv.

M. Sig. A dessertspoonful three times a day.—*Jour. Amer. Med. Association.*

GASTRIC HYPERACIDITY WITH CONSTIPATION.—

R Magnesiae,
 Pulveris rhei, aa ʒ ij.
 Sodii bicarbonatis,
 Pulveris sacchari, aa ʒ iv.
 Ol. menthae piperitæ, q. s.

M. Sig. Half to one teaspoonful in water two hours after each meal.—*Ex.*

INFLUENCE OF DIABETES MELLITUS ON THE FUNCTIONS OF THE FEMALE GENITAL ORGANS.—Danckworth (*Inaugural Dissertation, Halle; Cent. f. Gyn.*), from a study of diabetes mellitus, determined that this disease occurs only a little less frequently in women than in men; also that in women it occurs later in life. In the material of the Hallenser Frauenklinik, pruritus vulvæ was found as the first symptom of the disease in 20 per cent. of the cases, but pruritus vulvæ, unassociated with sugar in the urine, was frequently observed. Vulvitis diabetica is, when pronounced, most characteristic. Pruritus of diabetes is usually the primary resulting symptom of the general disease. A premature menopause from atrophy of the uterus, ovaries, etc., is relatively frequent and this is possibly caused by disease of the genital nerves. Diabetes can also produce disease of the uterine mucous membrane. Pregnancy may occur in diabetes, but, as a rule, it takes place in the beginning of the disease; also

diabetes may develop during pregnancy and without the patients being particularly predisposed to it. In one-third of the cases collected, abortion took place. In a number hy-dramnion was present. Labor and the puerperium are not influenced by the disease, but lactation is disturbed. The disease is usually made worse by pregnancy, labor and the puerperium, and rarely diabetic coma and death follow. The induction of abortion is never indicated. Danckworth concludes this very interesting monograph with a table of the cases, seen at the Hallenser Frauenklinik.—*Ex.*

TEETHING.—Irritation from non-advancing teeth occurs because the normally flinty teeth, to which the soft gums can offer no practical resistance, are suffering from lack of nutrition. While the gum lancet gives temporary relief, yet it transforms normal into cicatricial tissue. In place thereof, the writer, Dr. Wallen, recommends correcting any faulty conditions in the infants alimentary tract and placing upon a mixture of the calcic salts, approximating the proportions as nearly as possible to those found in the teeth. For example:

R Calcium phosphate, parts ij.
 Calcium carbonate, parts iij.
 Sodium phosphate, part j.

M. Triturate to an impalpable powder. Sig. Three to four grains or more, with other food, three or four times a day for a week; then once a day, *pro re nata*.

In anemic children a trace of ferric phosphate is added.—*Richmond Jour. Practice.*

PNEUMONIA WITH HEART FAILURE.

R Morphine sulph., gr. j.
 Pulv. camph.,
 Quinine sulph., aa gr. xxiv.

M. ft. caps. No. xij. Sig. One every two or three hours.—*Medical Summary.*

SWEATING FEET.—

R Formaldehyde,
 Thymol, aa gr. x.
 Zinc oxid., ʒ viiss.
 Powd. starch, ʒ xiiiss.

M. Sig. Apply as a dusting powder.—*Jour. American Med. Asso.*

INTERCOSTAL NEURALGIA.—BROWN-SÉQUARD'S prescription for neuralgia is as follows:

℞ Ext. hyoscyami,
Ext. conii, aa gr. 40.
Ext. ignatiæ,
Ext. opii, aa gr. 30.
Ext. aconiti, gr. 20.
Ext. cannabis indicæ, gr. 15.
Ext. stramonii, gr. 12.
Ext. belladonnæ, gr. 10.

M. Sig. Divide into sixty pills.

℞ Chloralis,
Camphoræ pulv., aa 3 i.
Morphinæ sulphatis, gr. 2.
Chloroformi, m 40.

M. Sig. m xx the dose. May be used locally.—*Bartholow, Ex.*

IRRITATING COUGH OF PHTHISIS.—When not accompanied by much expectoration the following mixture is recommended:

℞ Codeinæ, gr. iv.
Acidi hydrochlorici dil., 3 ss.
Spir. chloroformi, 3 iss.
Syr. limonis, 3 j.
Aq. dest., q. s. ad 3 iv.

M. Ft. emulsio. Sig. One teaspoonful at short intervals when cough is troublesome.—*Murrell, Jour. Amer. Med. Asso.*

PLASTIC OR CROUPOUS BRONCHITIS. Treatment divides itself under two heads: (1) means used to loosen and dislodge the plugs; (2) to prevent their recurrence. The employment of emetics seems rational, but unless the fibrinous casts are already lying loose, it is difficult to eject them by inducing vomiting. Besides, as we have no exact means of knowing when the plugs have become so thoroughly loosened that they can be thrown off, it is, on the whole, the wiser plan not to administer emetics. Various inhalations, medicated and otherwise, have been suggested, but in my experience I cannot say that any of them were of the slightest service. I regard the treatment of plastic bronchitis as, generally speaking, unsatisfactory. Nothing short of expulsion of the casts gives relief. Lime water or lactic acid sprays and inhalations, also solution of the alkaline carbonates, are not more reliable. The internal administration of iodide of potassium with or without expectorants gives as good results as

anything. Ewart recommends the cautious intratracheal injection of oil, or a mild solvent such as lime water or trypsin. To prevent recurrence I know of nothing better than the employment of such means as will improve the general health, living in a dry, bracing atmosphere, good food, the internal administration of tinct. quin. ammoniat., nuxvomica, and cascarrilla, with or without cod-liver oil.—*Oliver, British Med. Jour.*

REVULSIVE AND STIMULATING EM-BROCATION.—The *Progrès Méd.* ascribes the following formula to Huchard:

℞ Tinct. of juniper, parts 240.
Tinct. of lavender, parts 120.
Ol. of turpentine, parts 60.
Menthol,
Thymol, aa part 1.

M.—*N. Y. Med. Jour.*

LUTAUD'S LOTION FOR PRURITUS VULVÆ.—The *Journal de Médecine de Paris* gives the following formula:

℞ Distilled aq., parts 500.
Chloral hydrate,
Tinct. of eucalyptus, aa parts x.
Cocaine hydrochlorate, part j.

Medical Review of Reviews.

DEPILATORY.—

℞ Tinct. iodi, 0.5.
Ol. terebinth, 1.0.
Ol. ricini, 1.5.
Alcohol, 10.0.
Collodii, 40.0.

M. Sig. Apply twice daily. As the layer of collodion is peeled off the hairs come out with it.—*Münchener med. Woch.*

PLEURISY WITH EFFUSION.—

℞ Ammon. chloridi,
Ammon. carbonatis, aa 3 j.
Tinct. cubebæ, 3 iiss.
Syr. tolutani, q. s. ad 3 ij.

M. Sig. Teaspoonful in water every three or four hours.—*Butler, Med. Rec.*

GASTRALGIA.—

℞ Chloral, gr. iij.
Sodii hyposulphat., gr. vj.
Aq. menth. pip., 3 j.

M. Sig. At dose. Repeat as required by frequency of attacks guarding against over-use of chloral. *Riforma Medica.*

TO STIMULATE DIAPHORESIS.—

℞ Camphoræ pulv., 0.02–0.1.
 Pulv. opii, 0.02–0.03.
 Potass. acetatis, 0.02–0.3.
 Sacch. alb., 10.0.

M. ft. pulv. Sig. One powder in a cup of tea at bed-time.—*Graefe, Georgia Med. and Surg. Jour.*

IMPROVED LOTIO ALBA FOR ACNE, ETC.—

℞ Potass. sulphidi,
 Zinci sulphatis, aa 3 j.
 Aq. destillat.,
 Aq. camphoræ, aa 3 j.
 Aq. rosæ, 3 ij.

M. Sig. Shake and apply.—*Sherwell, Med. Rec.*

OINTMENT FOR ECZEMA.—

℞ Pulveris cocci, gr. j.
 Potassii cyanidi, gr. vj.
 Ungt. aq. rosæ, 3 j.

Ft. ungt. Sig. Rub a little firmly over the itching parts; let none of the ointment remain undissolved on the skin.—*Anderson, Ex.*

HYDRO-PERICARDIUM.—

℞ Saponis viridis, 50.

Sig. A piece the size of an almond to be rubbed into the skin over the cardiac region twice a day.—*Senator, Med. Rec.*

DIPHThERIA.—Dr. Robertson, in *Occidental Medical Times*, says:

"Bromine is readily soluble by the addition of 10 per cent. of alcohol, but if the solution is long kept it loses its color and becomes hydrobromic acid; it should, therefore, be prepared in small quantities as required for use.

My method is to commence with a cathartic, as calomel and rhubarb. Two hours later I begin to apply bromine solution topically (using the same strength for all ages and conditions), with a camel's hair brush, probang or a swab, to every part of the diseased membrane and beyond it. The following is the formula:

℞ Bromine, m iv.
 Alcohol,
 Syr. simp., aa 3 j.
 Aqua, 3 ij.

M. Sig. Apply every four hours.

This application is equally useful in tonsillitis and other forms of inflammation of the mouth and throat.

Two hours after the application I give internally, every four hours, one teaspoonful of the following to a child five or six years old:

℞ Bromine, m ij.
 Alcohol,
 Comp. syr. squilla, aa 3 ij.
 Aq., 3 iv.
 Syr. wild cherry, q. s. ad 3 ij.

It will be seen that by alternating the topical application with the internal treatment, one or the other will be brought in contact with the diphtheritic membrane every two hours. I give the bromine in doses of 1-8 to 1-2 a drop, according to the age of the patient.

The efficiency of this bromine treatment will be fully appreciated by every physician trying it, from 40 to 48 hours after the first topical application, and if no improvement is apparent within that time it will be as well to lay it aside and adopt some other course."—*Med. Summary.*

PHLEGMASIA ALBA DOLENS.—In phlebitis of the leg, from any cause, Da Costa (*Philadelphia Medical Journal*) is accustomed to wrap the whole limb in compresses of hot fluid extract of witch-hazel or of hot lead-water and laudanum. Laxatives are also given, and heart action is sustained by digitalis or kindred remedies. Absolute rest in bed and elevation of the limbs are essential. After the acute stage is over, if the swelling persists, gentle friction with belladonna or mercurial ointment, or both combined, may be carefully employed. Massage should be avoided until later, when it is useful for the persistent stiffness, lack of power and tendency to recurring swelling. At this period, likewise, the mechanical support of a bandage or a long elastic silk stocking is very advantageous.—*Louisville Medical Monthly.*

CONSTIPATION WITH SCANTY AND DEFECTIVE BILE SECRETION.—

℞ Acidi arseniosi,
 Hydrargyri chloridi corrosivi,
 aa gr. j.
 Pulv. ipecacuanhæ, gr. ij.
 Hydrargyri chloridi mitis, gr. xvj.

M. Div. in tab. No. xv. Sig. One or two tablets daily.—*Porter, Ex.*

ACUTE GASTRO-INTESTINAL CATARRH.—

R Creosote, *m* xij.
 Camph. tinct. opium, fl. 3 iv.
 Bismuth subnitrate, 3 iij.
 Pepsin (scales), 3 j.
 Syr. aurant. cort., *m* xxx.
 Aq. menth. pip., q. s. ad fl. 3 iij.

M. Sig. Teaspoonful every two hours for a child one year old.—*David, Columbus Med. Jour.*

SEPTICÆMIC INFECTION TREATED WITH ANTISTREPTOCOCCUS SERUM.—

Dr. J. Mitchell Bruce (*British Medical Journal*) reports one case of septic endocarditis, in the treatment of which the use of the antistreptococcus serum was entirely successful. The conclusions drawn from the one case are: (1) That antistreptococcus serum may succeed in septicæmia after ordinary means have failed; (2) that it may act with great rapidity, all the phenomena disappearing in the course of forty-eight hours. He also reported a case of septicæmia of the cerebro-spinal fever type, from which case he drew the following interesting conclusions: (1) As before, that in some cases of a septic kind antistreptococcus serum is successful; (2) as before, that the effect may be extremely rapid; (3) that success may be attained after other measures have failed; (4) that success may be attained with one serum, after another serum has failed. He advised that one should not be content with one serum if it proved unsuccessful.—*Med. Rec.*

ECZEMA IN CHILDREN.—

R Liquoris potassii arsenitis, *m* xj.
 Vini ferri amari,
 Syr. tolutani,
 Aq. anethi, aa 3 j.

M. Sig. A teaspoonful thrice daily after food.—*Wilson, Ex.*

INFUSION OF SALT SOLUTION COMBINED WITH OXYGEN INHALATIONS IN THE TREATMENT OF PNEUMONIA.—C. A. Penrose, in the *Johns Hopkins Hospital Bulletin*, reports three cases of pneumonia treated by this method. All of them were in *extremis*, and two of them died. He claims that the injection of salt solution in pneumonia will aid in its treatment, if

used by those familiar with the significance of the second pulmonic heart sound. If this is altered in quality, bleeding should be resorted to. In his judgment the hypodermic injection is preferable to the intravenous transfusion, as by this method toxins in the blood are diluted, delirium is relieved, and elimination is promoted through the sweat glands and kidneys. It lowers the temperature and stimulates the heart, and, what he regards as of still greater importance, seems to render the patient much more susceptible to the influence of oxygen.

In giving oxygen, it is passed through a wash-bottle containing a pint of hot water, in which has been placed a drachm of a mixture composed of:

Creosote (beechwood),
 Ol. turpentine, aa 3 ss.
 Comp. tr. benzoin, 3 ij.

The gas is given by a funnel suspended in front of the patient's face by a framework, thus avoiding the use of a nozzle for the nose and mouth. This, he claims, is the preferable way to administer the gas; it allows the patient to rest and often sleep. The effect of the inhalation mixture is to clean the mouth and tongue and promote expectoration.
Ex.

AN ELECTUARY FOR HABITUAL CONSTIPATION.—

R Washed sulphur,
 Cream of tartar, aa parts iv.
 Senna leaves, parts ij.
 Powd. cardamom, part j.
 Syr. of rhamnus, q. s. to give the right consistency.

M. Sig. A teaspoonful to be taken morning and evening.—*Jour. de Méd. de Paris.*

VOMITING OF UTERINE ORIGIN.—

R Menthol, gr. v.
 Tinct. opium, 3 iiss.
 Elixir of pepsin, 3 j.

M. Sig. Ten to twenty drops before meals.—*Lutaud, Med. Rec.*

SCABIES.—

R Sulphur. loti, 3 j.

Sig. Apply in the dry state to the whole surface twice a day and sprinkle a teaspoonful between the sheets at night.—*Sherwell, Med. Rec.*

THE PRESCRIPTION

Therapeutic Cullings.

VULVITIS.—

R Liquoris plumbi subacetatis, 3 j.
Tinct. hyoscyami, 3 ij.
Aq. camphoræ, q. s. ad 3 viij.
M. et ft. lotio. Sig. Apply with saturated cloth.—*Waring, Med. Rec.*

LUMBAGO.—

R Potassii iodidi, 3 ss.
Tinct. opii deod., 3 ij.
Spir. lavandulæ comp., 3 j.
Spir. ætheris nitrosi, 3 ss.
Aq. destillatæ, 3 xij.
M. Sig. Two tablespoonfuls twice daily.—*Brodie, Med. Rec.*

SUPERFICIAL BURNS. — According to the *Gazzetta degli ospedali e delle cliniche* Reclus extols the following ointment:

R Iodoform, from gr. 7½-15.
Antipyrine,
Boric acid, aa gr. 75.
Vaseline, gr. 600.

M.

Wertheimer applies to burns, especially in children, the following liniment:

R Thymol, from gr. 1½-2.
Limewater,
Linseed oil., aa gr. 1,500.

M.

Starr, to allay the pain and prevent the formation of bullæ, applies instantly to a superficial burn the following ointment:

R Perchloride of iron, gr. 90.
Vaseline, gr. 360.

M.

Haas uses an ointment made by dissolving from 150 to 300 grains of aristol in 600 grains of lanolin and the same quantity of vaseline.

Landolt and Gygax employ the following formulæ:

For burns of the first degree:

R Cocaine hydrochloride, gr. 22½.
Vaseline,
Distilled aq., aa gr. 150.
Lanolin, gr. 45.

M.

For those of the second degree:

R Cocaine hydrochloride, gr. 22½.
Salol, gr. 75.
Vaseline, gr. 375.

M.

And for those of the third degree:

R Europhene, gr. 22½.
Olive oil., gr. 52½.
Lanolin, gr. 225.
Vaseline, gr. 450.

M.

This ointment is said to be specially serviceable in burns of the eyelids. *N. Y. Med. Jour.*

WHOOPIING COUGH.—Dr. J. Madison Taylor calls attention to the value of a remedy to relieve and check the paroxysm, which may be safely applied by the mother or nurse. This consists of a mixture of:

R Amyl nitrite, 3 ss.
Spir. of chloroform, 3 iij.
Ether sulph., 3 v.

M. Sig. A few drops on a handkerchief and held to nose during "lock spasm."—*Med. Summary.*

We have every reason to believe that the above may prove exceptionally valuable, for the reason that a few drops of chloroform alone proves very efficacious under the conditions mentioned.—*Ed.—Peoria Med. Jour.*

NEUTRALIZING CORDIAL.—

Powd. rhubarb,
Carbonate of potassium, aa 3 ij.
Powd. golden seal,
Powd. cinnamon, aa 3 j.
Sugar, white, 3 64.
Brandy, O viij.
Ol. of peppermint, gtt. xx.

Macerate for fourteen days, and filter, or make by percolation. Dose, one to two teaspoonfuls.—*Ex.*

CYSTITIS.—

R Ext. hyoscyami,
Ext. cannabis indicæ, aa 0.4.
Sacch. alb., 5.
M. ft. pulv. div. in dos. æq. No. xii. Sig. One powder, t. i. d.—*Ulmann, Medical Record.*

RELIEF OF PAIN AND VESICAL SPASMS.—

R Ext. opii, gr. vj.

Ext. hyoscyami, gr. iij.

Ol. theobromatis, q. s.

M. et ft. suppositoria No. vi. Sig. Introduce one into rectum and repeat in two hours if required.—*Ex.*

REMARKABLE DIGESTIVE QUALITIES OF CAROID, (Vegetable Pepsin).—A claim that a digestive ferment possesses all the characteristics of other digestives, and much besides, is of interest. Such a claim has been made for "caroid," the digestive ferment of *Carica-Papaya*. Chittenden states that caroid digests proteids, converts starch, curdles milk, then attacks the casein, making it soluble and diffusible. It acts in alkalis or acids, and is not interfered with by many drugs which totally inhibit the animal ferments. There are tests that can be performed by any one without the aid of a laboratory, so that no one need be in doubt as to the remarkable qualities claimed for the article.

In view of the immense significance of these statements, the *Clinic* has seen fit to have the tests made under the supervision of the editorial staff, for the benefit of our readers. The results present a remarkable evidence of the value of caroid, and indicate that it is not a single ferment, but a combination of digestives, wholly different in character from any of the animal products. Neither of the animal ferments, nor any combination of them will yield the results secured from caroid. Animal pepsin shows action upon albumen only when it is finely ground and suspended in a large volume of acidulated water. Caroid acts under actual conditions as they exist.



Fig. 1.



Fig. 2.

A raw steak weighing about $\frac{1}{4}$ pound was placed on a plate. Four or five grains of caroid were rubbed well into the meat, and it was then allowed to stand six hours in the ordinary office temperature, after

which time the texture of the meat was seen to have been broken down, and the whole, except the bone, in the condition of a salve or jelly. Saccharated pepsin, tested under similar conditions, showed no perceptible action. This experiment was also made with caroid and hydrochloric acid, and also with caroid and sodium bicarbonate. The results were equally favorable, the alkaline mixture appearing to act somewhat more promptly. It was demonstrated beyond reasonable doubt that caroid has a powerful digestive action upon meat, and that this goes on irrespective of the presence of acids or alkalis.

Digestion of Mixed Food.—Similar experiments upon mixed food, containing all the constituents of a full meal, showed that neither fats, starches, nor any other digestible elements escaped the action of caroid while the undigested residue was inconsiderable.

Milk Digestion.—Five grains of caroid were stirred into a glass of fresh, pure milk, heated lukewarm. The immediate effect noticeable was the curdling or separation of the



Fig. 3.

casein (Fig. 3), followed by the slower secondary action in which the curd is entirely dissolved and converted into soluble and assimilable products (Fig. 4) within two hours,



Fig. 4.

a result that is not obtained with any one of the animal ferments.

The persistency of caroid action upon fibrine, hence its value as a solvent of diphtheritic membrane, was shown by the following test, which proves that its action upon meat fibre is continuous, and is not interfered with by washing or by fluids in which caroid is soluble. This action is best understood by reference to the cuts.

Two ounces of lean, raw beef, cut into thin strips, into which has been rubbed four or five grains of caroid,

were allowed to stand a half hour, when it was transferred to a filter, which was encased in a muslin bag. The bag containing the meat was then placed under a faucet of running water (Fig. 5), where it remained



Fig. 5.

three hours, after which it was allowed to stand in the ordinary living-room temperature for three hours. Cut No. 6 shows the final result—the meat having been all digested, save a small residue of gristle.



Fig. 6.

We conclude from these experiments that the claims made in behalf of caroid are fully warranted, and that we have in it a digestive without parallel.

W. C. Abbott, M. D.,
Ravenswood, Ill. Ed. *Clinic*.

[The above article is reproduced by this journal on account of the remarkable statements contained, and the general bearing of the results claimed to have been secured—which, as Dr. Abbott says, no one need be in doubt about, the *very simple means* of proving or disproving their genuineness being within the reach of any one.—ED.]

ACID URINE AND FREQUENT URINATION.—

℞ Lithii citratis, ʒ ij.
Tinct. opii camphoratae, ʒ j.
Infusi lupulini, q. s. ad ʒ xvj.

Sig. Tablespoonful in water after meals.—*Ex.*

ALOPECIA.—

℞ Ext. jaborandi fl.,
Tinct. cantharidis, aa fl. ʒ ss.
Glycerinæ,
Ol. vaselini, aa ʒ j.

M. Sig. Apply locally with a sponge at night.—*Bartholow*.

℞ Tinct. macis, fl. ʒ iss.
Ol. olivæ, ad fl. ʒ ij.

M. Sig. Apply two or three times a day to affected spots.—*Hebra*.

℞ Quinæ sulphat., 3 ss.
Tinct. cantharidis, fl. ʒ j.
Spir. ammon. arom., fl. ʒ j.
Ol. ricini, fl. ʒ iss.
Spir. myrciæ, fl. ʒ vss.
Ol. rosmarini, gtt. v.

M. Sig. Shake well. Apply with stiff brush two or three times a day.
Gerhard, Dominion Med. Mon.

THE TREATMENT OF SYPHILIS BY SUBCUTANEOUS OR INTRA-MUSCULAR INJECTIONS.—Dr. Maurange (*Gaz. hebdom. des Sci. Méd.*) has modified the formula recently proposed by Dr. Cheron. The latter suggested 20 cc. of artificial serum containing 2 grm. 50 ctgrm. of bichloride of mercury to the litre. These injections should not be repeated oftener than every six or eight days. Dr. Maurange has for the past three years treated syphilis successfully by the intra muscular injection of artificial serum containing bichloride of mercury in the proportion indicated by Dr. Cheron, but injected each time 4 cc. of serum and 1 mgrm. of bichloride of mercury, repeating the injection every two days. This method seems preferable as it does not expose the patient to the accidents attendant upon large doses of mercury, such as stomatitis, diarrhoea, etc. The elimination and absorption of this salt in solution in artificial serum are very rapid. The action of mercury on the organism is not so prolonged as in the case of repeated injections of small doses of soluble salts or less frequent injections of insoluble salts.
Med. Rec.

CHLOASMA.—

℞ Naphthol, 2.
Glycerin, 1.
Tinct. sapo. virid., 50.

M. Sig. Apply twice daily.—*Kaposi, Med. Rec.*

ALKALINE URINE.—

℞ Acidi borici, ʒ iiss.
Ext. uva ursi fl.,
Ext. hyoscyami, fl.,
Ext. lupulini, fl., aa ʒ iv.
Syr. zingiberis, ʒ ij.
Aq., q. s. ad ʒ vj.

M. Sig. Two teaspoonfuls in water after meals.—*Ex.*

SUMMER COMPLAINT.—Dr. C. C. Adair, of Bailey, Tex., writes: "I feel like contributing some of my experience with the bowel troubles that we have so often to deal with in babies, especially during the hot months of summer. I have given this subject considerable thought, and in spite of all that I can learn in regard to the treatment, failure sometimes baffles my efforts. Doctors, our success depends largely on the number of babies we cure. I always devour all the literature on this subject that comes within my reach. I will give here a prescription with which I have had fairly good success:

℞ Bismuth subnit., 3 4.
Pepsin sac., 3 2.
Tinct. opii, gr. 45.
Arom. spir. ammon., 3 1.
Aq. cinnamoni,
Syr. zingiberis, aa 3 1.
Syr. simp., q. s. 3 4.

M. Sig. Teaspoonful every three or four hours.

I sometimes add the following to be taken along with the above:

℞ Hydrarg. bichlor., gr. ss.
Tinct. cinchona, 3 j.
Aq., pure, q. s. 3 iv.

M. Sig. Teaspoonful every three or four hours.

I also direct parents to be more careful as to diet and have them give the little patient a daily bath."—*Ex.*

PLEURODYNIA.—*Le Progrès Médical* attributes to G. Lyon the following combination:

℞ Vaseline,
Lanolin, aa 3 ½.
Salicylate of methyl,
Guaiacol, aa 3 ¼.
Ext. belladonna, gr. 3.
Ext. opium, gr. 4.

Amer. Bul.

SOME USES OF PILOCARPIN.—S. Harnsberger notes some uses of this drug not mentioned in recent text books. He cites three cases illustrating its benign effects in orchitis; it is given in one-eighth grain doses of the hydrochlorate, repeated every two to six hours, with one-half grain doses of codein, as may be necessary to produce copious sweating and relieve pain. The same drugs, in similar combination, are of great service in cholelithiasis and nephrolithiasis. In both hepatic and nephritic colic the pilocarpin is best administered subcutaneously. It deserves a trial in tonic spasm of the diaphragm, in certain cases of hiccough; in cases of stricture and obstruction of the intestine when iced-poultices and wet-compresses are ill borne, codeine and pilocarpin may be used with

benefit. The easiest and quickest way to remove ranula is by means of one-sixth grain of pilocarpin hypodermically.—*Med. Rev.*

HAIR TONIC.—

℞ Pilocarpinæ hydrochloratis, gr. ij.
Tinct. cantharidis, 3 j.
Quininæ hydrochloratis, gr. xv.
Ol. sesami, 3 ij.
Glycerini, 3 iv.
Spir. myrciæ, 3 iv.
Aq. rosæ, q. s. ad 3 viij.

M. Sig. Rub into scalp night and morning, in syphilitic subjects, also in loss of hair after prolonged illness. *Med. News Form.*

MALIGNANT PUSTULE.—Dr. Castroverde thus sums up his paper on this subject:

1. That the cauterization should be marginal if it is not to occasion much destruction and suffering, as it was practiced by the old time surgeons.

2. The integrity of the escharotic crust must be preserved, using on it a protective cover to avoid contact with the infectious germs in the air.

3. Bichloride of mercury internally has given excellent results, as have also hypodermic injections of carbolic acid in 2 per cent. solutions made twice or thrice daily in the thickness of the cedematous zone and repeated until the cedema has disappeared. The scar is removed by means of permanent irrigation of the pustule with carbolic acid, bichloride or bichromate solutions at a somewhat elevated temperature. By these means perfect antiseptis is maintained.—*N. Y. Med. Jour.*

INFANTILE COLIC.—

℞ Sodii bicarbonatis, gr. ij.
Ol. ricini, 3 j.
Tinct. opii camphorata, gtt. ij.

M. Sig. One dose, for acute indigestion, in infant six to eighteen months old.

℞ Aq. menthæ viridis,
Aq. camphoræ,
Aq., aa 3 iv.

M. Sig. Teaspoonful as required for pain and flatulence.—*Ex.*

INTERTRIGO.—The *Riforma medica* gives the following as Besnier's formula:

℞ Quinine oleate, part j.
Lanolin, parts xxx.
Olive oil, parts xx.

M. To be rubbed on twice a day, after which the parts are to be dusted with powdered starch.—*N. Y. Med. Jour.*

BLEPHARITIS.—

- ℞ Red oxide of mercury, gr. x.
Vaseline, fl. ʒ ss.

M. Sig. Apply to the edge of lid at bedtime.

Or:

- ℞ Ammoniated mercury, gr. xx.
Powd. camphor, gr. x.
Vaseline, fl. ʒ ss.

M. Sig. Apply at night.

Or:

- ℞ Solution of subacetate of lead,
gtt. x.
Ointment of rosewater, 3 iij.

M. Sig. To be used for the more chronic forms of marginal blepharitis.
Millendorf, Dom. Med. Mon.

LOCAL TREATMENT OF DIPHTHERIA.

A Swedish physician, N. Englund, whose practice is remote from a large town, and who finds it impossible always to obtain diphtheria serum when needed, has been so successful with local treatment that he has only lost 3 patients out of 197, a mortality of 1.52 per cent. His method is the simultaneous use of trichloride of iodine, sodium sozoiodolate, sulphur, and ferric chloride. The formula for the gargle is:

- ℞ Trichloride of iodine, grm. 5.
Aq. dest., grm. 500.
Saccharin, grm. 0.50.

M. Dilute with ten parts water and gargle ten times a day. Insufflate into nose and throat, after each gargle a powder composed of sodium sozoiodolate, 5 grammes; sulphur, 15 grammes. Administer in addition to this treatment, 15 to 40 drops of ethereal tincture of ferric chloride four times a day.—*Jour. Amer. Med. Asso.*

MAMMARY INFLAMMATION.—

- ℞ Ungt. belladonnæ, ʒ j.
Ungt. hydrargyri,
Ichthyoli, aa ʒ iv.
Cerati plumbi subacetatis, ʒ j.

M. Sig. Apply to breasts freely and employ tight breast binder.—*Med. News Formulary.*

TOPICAL USE OF QUININE IN LEUCORRHOEA.—

Dr. Hardwicke speaks as follows about the topical application of quinine to the mucous membrane of the cervix uteri and vagina in cases of leucorrhœa: A patient, the mother of six children, who had been a sufferer from the above complaint for some years, having used the various remedies usually prescribed in such cases, but with only temporary benefit, her trouble sooner or later recurring, adopted the use, from prudential motives, of what proved to be quinine pessaries. Since using them not only had her leucorrhœa

disappeared, but her general health had improved. I have since used quinine topically in several cases of simple leucorrhœa, always with great success—in fact, I do not know of a single instance in which it has failed or in which quinism has been produced. It may be used in the form of douche or pessary. I adopt the latter form as being obviously the better one; the drug has a better chance of closer and more continuous contact with the congested membrane. I prescribe three grains of the hydrobromate in a ½ drachm pessary in combination with oleum theobromatis, but the pessus quininae of the "Extra Pharmacopœia," containing the hydrochloride, answers just as well. One insertion a day is generally sufficient.—*Canadian Pract. and Review.*

BRUISES.—

- ℞ Tinct. opii,
Liquoris plumbi subacetatis,
aa fl. ʒ j.

Aq. destillatæ, q. s. ad fl. ʒ xvj.

M. Sig. Apply freely on old soft rags or lint. Must not be employed if the skin is broken. If skin is broken, part must be dressed antiseptically and hot or cold applications made.

- ℞ Potass. chlorat., 3 ss.
Tinct. iodi.,
Aq., aa fl. ʒ ss.

M. Sig. Apply locally.—*Breninger, Dom. Med. Mon.*

CAMPHOR AS AN ANTIDOTE TO CARBOLIC ACID.—Alvarez relates a case of carbolic acid poisoning to which he was called in consultation. He thought that the poison had all been absorbed, and so he did not try to provoke vomiting, but advised camphorated oil to the amount of about 3 ounces, simply for the sake of its soothing action on the gastric and œsophageal lesions probably caused by the acid. But it seems to have accomplished more than this for the patient recovered.—*N. Y. Med. Jour.*

VESICAL IRRITATION AND PROSTATIC HEMORRHAGE.—

- ℞ Tinct. veratri viridis, 3 j.
Morphinæ sulphatis, gr. ij.
Ext. ergotæ fl., ʒ iv.
Syr. zingiberis, ʒ j.
Aq., q. s. ad ʒ iij.

M. Sig. Teaspoonful in water every two or three hours.—*Ex.*

EPIDIDYMITIS.—

- ℞ Ext. belladonnæ, i.
Ungt. simpl., 20.

M. Sig. Apply.—*Neumann, Med. Record.*

COPPER PHOSPHATE IN TUBERCULOSIS AND CHLOROSIS.—

- ℞ Neutral acetate of copper, gr. $\frac{1}{2}$.
Crystallized sodium phosphate, gr. $\frac{1}{2}$.
Licorice and glycerin, q. s. to make one pill.
Two pills to be taken daily.
℞ Copper phosphate, gr. xv.
Distilled aq.,
Pure glycerin, aa gr. 38.
M. For hypodermic injection.—*Le Progrès Méd.*

UTERINE GONORRHEA.—In discussing the value of the new silver preparations, it must not be forgotten that some of the earlier ones are of great value; many still prefer them. Dr. Shultz states that he has obtained far better results from the use of argentamin in internal gonorrhea than from any other. The argentamin, which was first made from silver phosphate, is now made from the nitrate.—*Med. Rev.*

PNEUMONIA.—In order to promote renal elimination, Dr. F. M. Hill, of Persia, Iowa, says, in the *Med. World* that his favorite combination is:

- ℞ Fl. ext. hydrangea,
Spir. ætheris nitrosi, aa $\frac{3}{4}$ iv.
Acidi salicylic., 3 ss.
Fl. ext. gelsemium, 3 ij.
Ess. gaultheria, m xx.
Syr. simplicis, q. s. ad $\frac{3}{4}$ xij.
M. Sig. Adult dose, teaspoonful every four to six hours.—*The Med. Bulletin.*

CHRONIC BRONCHITIS.—In the majority of cases the derivatives of tar, turpentine and balsams are the most efficient expectorants. They are specially indicated in relaxed conditions of the mucous membranes, with excessive secretion, in combination as follows:

- ℞ Ol. terebinthinæ,
Picis liquidæ, aa m 20.
Ol. eucalypti, m 50.
Balsami toluatani, 3 i $\frac{1}{4}$.
Benzosol, 3 4.
M. et disp. in caps. No. 60. Sig. One four or five times a day.—*Butler, Med. Stand.*

DIURETIC MIXTURE.—

- ℞ Buchu, long, $\frac{3}{4}$ vj.
Uva ursi, $\frac{3}{4}$ iv.
Juniper berries, bruised, $\frac{3}{4}$ ij.
Acetate of potassium, $\frac{3}{4}$ iss.
Alcohol,
Aq., aa $\frac{3}{4}$ viij.
Macerate for fourteen days, and filter through paper. Dose, one to two teaspoonfuls three times a day.—*Jour. Amer. Med. Asso.*

TINCTURE OF IODINE IN DIARRHŒA OF CHILDREN.—Dr. Gosch (*Riforma Medica*) recommends the tincture of iodine in acute infectious gastro enteritis in children, in doses of from two to four drops in sugar-water every eight hours, for three days in succession. He claims it works promptly; the fever and diarrhœa cease, and the sensorium again becomes free. In adults in doses of six drops, three or four times a day, the result is not so rapid, but just as certain. He employs the following mixture:

- ℞ Tinct. iodi, o.5.
Syr. simpl., 15.0.
Aq. destill., ad 150.0.
M. Sig. One to two tablespoonfuls in the course of twenty-four hours.—*Med. Rec.*

INTERMITTENT AND REMITTENT FEVER.—

- ℞ Cinchonæ sulphatis, 3 ss.
Liq. potassii arsenitis, 3 iss.
Tinct. ferri chloridi, 3 iv.
Syr. zingiberis, $\frac{3}{4}$ iss.
Aq. destil., q. s. ad $\frac{3}{4}$ iv.
M. Sig. Dose, a dessertspoonful after meals. (In chronic cases.)—*Tutt, Jour. Amer. Med. Asso.*

CHRONIC PURULENT RHINITIS.—

- ℞ Sozodole potassium, part 1.
Talcum, parts 2.
M. Sig. For insufflation—*Suchanek, Teichmann, Merck's Arch.*

ANTI-BILIOUS MIXTURE.—

- ℞ Podophyllin (resinoid), gr 128.
Cream of tartar, pure,
Buchu leaf, aa $\frac{3}{4}$ 16.
Leptandrin, (resinoid), $\frac{3}{4}$ i.
Gentian, ground, $\frac{3}{4}$ 2.
Alcohol, O 3.
Aq., boiling, O 5.
Dissolve the cream of tartar in three pints of the water, to which have been added four ounces of powdered borax. Boil for five minutes, allowing the mixture to cool, and then filter. Dissolve the resinoids in a pint of the alcohol, and add to the cream of tartar solution; also add the remaining alcohol, water and the gentian and buchu, macerate for fourteen days. Express and filter. Dose, a teaspoonful.—*Jour. Amer. Med. Asso.*

DIURETIC IN ASCITES AND ŒDEMA FROM BRIGHT'S DISEASE.—

- ℞ Copaiba resin, gr. 10.
Diluted alcohol, m 15.
Spir. of chloroform, m 10.
Syr. of ginger, m 40.
Mucilage of acacia, m 80.
Aq., q. s. ad $\frac{3}{4}$ i.
M.—*Canadian Pract. and Rev.*

IMPOTENCE.—

- ℞ Phosphori, gr. $\frac{1}{4}$.
 Ferri arsenitis, gr. i.
 Strychninæ hydrochloratis,
 Quininæ hydrochloratis, aa gr.

24.

M. ft. pil. No. xxiv. Sig. One pill three times a day after meals.

- ℞ Camphoræ,
 Quininæ hydrochloratis, aa gr. xxiv.
 Ext. nucis vomicæ, gr. xij.
 Tinct. cantharidis, m xxiv.
 Oleoresinæ capsici, gr. iv.

M. ft. pil. No. xxiv. Sig. One pill after meals.—*Jour. Amer. Med. Asso.*

ABDOMINAL PALPITATIONS.—Nitroglycerin should be given in these cases. It may be taken during the attack, but it is better to give it once or twice a day, or, if needful, more often. A small dose will generally be found sufficient to affect the disorder. One one-hundredth of a grain every night is often sufficient. But if, as the palpitations subside, the other symptoms remain, it will be necessary to attend to them. However, it is surprising how the equalization of the circulation affects the other miscellaneous symptoms in many instances.—*Wade, Brit. Med. Jour.*

RHEUMATISM.—Apply locally:

- ℞ Phenacetin, 3 j. + gr. xv.
 Lanolin, 3 v.
 Ol. oliv., q. s

M. ft. ungt.

Or:

- ℞ Phenacetin, 3 j. + gr. xv
 Spir. vini rectific.,
 Aq. calid., aa 3 iij.

M. Sig. Soak compresses in above and apply.—*Rev. de Cienc. Med. de Barcelona.*

PARALYSIS AGITANS.—R. T. Williamson, before the Manchester Therapeutical Society, (*Med. and Surg. Rev. of Revs.*) expressed the hopelessness of these cases when he said that all that can be done is to make life more tolerable. Systematic open-air treatment is valuable. Williamson has tried strychnine, arsenic, iodide and bromide of potassium, calabar bean, gelsemium and cannabin tannate without favorable results. Morphine hypodermically gives relief, but this treatment is objectionable in a chronic disease. Hyoscin is the only drug which he has found useful, and he feels sure of its power to relieve many of the troublesome symptoms. He prescribes one-fourth grain in six ounces of chloroform water, the dose being two teaspoonfuls, corresponding to

$\frac{1}{4}$ grain of hyoscin hydrobromate. The dose may be increased to $\frac{1}{2}$ grain. In these larger doses the drug seems to diminish the trembling, uneasiness and restlessness. After some weeks the drug loses its good effect, and it is then necessary to withdraw it for a time, after which it may be again renewed.—*Ex.*

BRONCHITIS.—

- ℞ Ammon. carb., ʒ ij.
 Spir. chloroform, fl. 3 ss.
 Infus. senegæ, fl. 3 viij.

M. Sig. Tablespoonful every four to six hours.—*Fothergill.*

- ℞ Acid. hydrocyan. dil., m xvj.
 Syr. prun. virg.,
 Aq. camphoræ, aa fl. 3 j.

M. Sig. Teaspoonful every two or three hours.—*Hartshorne, Dom. Med. Mon.*

SIMPLE CATARRHAL CONJUNCTIVITIS.—

- ℞ Acidi borici, gr. 40.
 Sodii chloridi, gr. 6.
 Aq. camphoræ,
 Aq. destil., aa 3 2.

M. Sig. Apply as lotion to eye every two hours.—*Ex.*

SULPHATE OF SODIUM IN CATARRH OF STOMACH.—According to *La Med. Moderne*, Simon, of Vienna, uses small doses of sulphate of soda for the treatment of this condition. He usually gives from ten to fifteen grains of it in about six ounces of hot water and under these circumstances the catarrhal condition of the stomach, with its hyperacidity, passes away, and the sensations of pain and discomfort in the epigastrium with nausea are relieved. This method of treatment is supposed to do good by improving the motor-power of the stomach.—*Ex.*

LAXATIVE ELIXIR.—

- ℞ Fl. ext. dandelion, 3 vj.
 Fl. ext. wild cherry, 3 iv.
 Fl. ext. gentian,
 Fl. ext. licorice, aa 3 j.
 Fl. ext. senna, 3 iij.
 Aromatic elixir, 3 xivss.

M. Dose, one or two teaspoonfuls. *Jour. Amer. Med. Asso.*

INTRA-LARYNGEAL APPLICATION FOR TUBERCULOUS DYSPHAGIA.—The *Riforma medica* attributes the following formula to Freudenthal:

- ℞ Menthol, gr. 150.
 Ol. of sweet almonds, gr. 450.
 The yolks of two eggs.
 Orthoform, gr. 187 $\frac{1}{2}$.
 Distilled aq. q. s. to make, gr. 1,500.

M.—*The North Amer. Med. Rev.*

TOOTHACHE. — Dauchez (*Progres Med.*) recommends:

- ℞ Hydrochloride of cocaine, gr. $1\frac{1}{2}$.
Menthol,
Crystallized carbolic acid, aa gr. 15.
Ol. of cloves, gtt. 5.
Camphorated alcohol, gr. 120.

M.

Or:

- ℞ Orthoform,
Carbolic acid, aa gr. 15.
Camphor,
Chloral hydrate, aa gr. 60.

The tooth cavity to be dried and then filled with cotton impregnated with either of these preparations.—*The North Amer. Med. Rev.*

ANGINA PECTORIS.—The best remedy during the attack is the inhalation of amyl nitrite. This should be administered in glass capsules, to be crushed in a handkerchief held to the nose. The beginning dose is four minims, which must later be increased up to eight. If the attack is prolonged trinitrin should be given per os or subcutaneously, as in the following formula:

- ℞ Sol. trinitrini (1 per cent.) gtt.

ii.

Aq. laurocerasi, 10.0.

One or more syringes full may be injected, or three drops of trinitrin in water, increased to six drops.—*Ex.*

IPECACUANHA IN DYSPEPSIA WITH MOTOR INSUFFICIENCY OF THE STOMACH.—M. Mathieu (*Press Med.; Rev. med.*) prescribes the following:

- ℞ Tinct. of ipecacuanha,
Tinct. of calumba,
Tinct. of gentian, aa gr. 75.

M. From fifteen to thirty drops after food, in two or three doses, at half hour or hour intervals, in a little water.

Or:

- ℞ Tinct. of ipecacuanha, gr. 90.
Saccharin, gr. $1\frac{1}{2}$.
Menthol, gr. $3\frac{3}{4}$.
Alcohol, at 80°, gr. 600.
Syr., gr. 1,800.

M. From two to four teaspoonfuls after meals.—*The North. Amer. Med. Rev.*

ALCOHOL AS AN ANTIDOTE FOR CARBOLIC ACID.—Occasional reports of carbolic acid poisoning, which appeared in recent issues of the current medical press remind us of the success achieved by Phelps in antidoting carbolic acid by the use of alcohol, says the *Med. Rev.* He states that the hands may be washed with impunity in 95 per cent. carbolic

acid by the use of alcohol. He has employed injections of pure carbolic acid in suppurating cavities and has then washed them out with alcohol. The procedure has not been accompanied by carbolic acid intoxication. The method has been found to be very efficient in immediately sterilizing suppurating cavities, and many cases have been followed by a rapid absorption of the walls of the abscess and an obliteration of its cavity. The importance of the discovery in relation to accidents with carbolic acid cannot be over-estimated. The frequency of accidental poisoning with this drug has greatly increased of late years and the occasional accidental spillings of the contents of a bottle of strong carbolic acid over some portion of the body is by no means infrequent. The application of alcohol to these cases is said to furnish a perfect antidote. Carbolic acid, when swallowed, if followed at once by alcohol, is said to be immediately antidoted.—*Jour. Amer. Med. Asso.*

GONORRHOEAL RHINITIS IN INFANTS. De Stella (*Belgique medicale; Goir-nale internationale delle scienze mediche*) recommends penciling the nasal passages with a two per cent. solution of protargol and the application to the nostrils of an ointment made after the following formula:

- ℞ White vaseline, gr. 225.
Boric acid, gr. 22.
Menthol, gr. $\frac{3}{4}$.

M.—*The North Amer. Med. Rev.*

SENILE PRURITUS.—Upon the principle that senile pruritus is dependent upon intestinal autointoxication, it is recommended that after purging the patient, a milk diet be ordered and an intestinal antiseptic (2 grm. benzo-naphthol daily) be administered. Even in severe and obstinate instances good results have been obtained within twenty-four hours.—*Parisot, Semaine Méd.*

METHYLENE BLUE IN MALARIA.—The *Indépendance médicale* attributes to Parenski the following:

- ℞ Methylene blue, gr. 15.
Aq. dist., gr. 150.

M. One cubic centimetre (sixteen minims) may be injected daily.—*N. Y. Med. Jour.*

OBSTINATE VOMITING.—

- ℞ Menthol, 0.02.
Tinct. thebaici, 5.
Spir. rectificat., q. s. ad 20.

M. Sig. Ten to twenty drops as often as necessary.—*Pick, Münchener med. Woch.*

TO CREATE A DISTASTE FOR DRINK. Jergolski claims that eight drops of tincture of strophanthus three times a day will create a distaste for drink.

The following prescriptions have been recommended for alcoholism:

- ℞ Auri et sodii chloridi, gr. $\frac{1}{4}$.
Strychninæ nitratis, gr. $\frac{1}{4}$.
Nitroglycerini, gr. $\frac{1}{16}$.
Atropinæ sulphatis, gr. $\frac{1}{16}$.
Digitalini, gr. $\frac{1}{4}$.
Sodii chloridi, gr. $\frac{1}{2}$.

M. ft. tab. No. 1. For hypodermic use.—*Dunham*.

- ℞ Spir. ammonii aromatici, 3 ij.
Tinct. camphoræ, 3 iss.
Tinct. hyoscyami, 3 iiss.
Spir. lavandulæ comp., q. s. ad 3 ij.

M. Sig. One teaspoonful every hour.

Tyson recommends the following to prevent the adynamia which may follow the sudden withdrawal of alcohol:

- ℞ Spir. ammonii aromat., 3 ss.
Strychninæ, gr. $\frac{1}{4}$.

M. Sig. For one dose. Repeat every three hours.

To relieve the symptoms of gastritis and the craving for alcohol:

- ℞ Decocti althææ, 3 v.
Aq. chlori,
Sacchari, aa 3 ij.

M. Sig. Tablespoonful every two or three hours.—*Zedekauer, Ex.*

LASTING ANESTHESIA.—Lasting anesthesia can be produced by spraying chloride of ethyl over a surface previously moistened with a concentrated watery solution of cocaine. Cocainized chloride of ethyl has been employed for opening abscesses, etc. *Bardet, Med. Rec.*

PRURITUS VULVÆ.—

- ℞ Acidi carbolici, gr. x.
Morphinæ acetatis, gr. viij.
Acidi hydrocyanici diluti, 3 ij.
Glycerini, 3 iv.
Aq., q. s. ad 3 iv.

Ft. lotio. Sig. Apply twice daily. *Atthill, Jour. Amer. Med. Asso.*

TUBERCULOUS CYSTITIS IN CHILDREN. Cumston (*Boston Med. and Surg. Jour.*) gives the following outline of treatment: Cod liver oil, creosote, and tonics are of value and iodoform in the form of a pill is highly recommended by Guyon and Reverdin. Locally an iodoform or guaiacol emulsion is to be injected into the bladder and retained until expelled. The ulcerations may be cauterized and curetted, if they be extensive. Being aware of the favorable results obtained from local applications of lactic acid in tuberculous laryngitis,

the author was led to try this agent in the bladder, and the results obtained in the case subjected to this treatment, warrant the further trial of the drug.

When suprapubic cystotomy is performed to bring about a radical cure, it should be done only in primary vesical tuberculosis and then much can be expected from drainage of the bladder. The ulcerations can be directly cauterized with the thermo-cautery, or when excised through the opening. When cystotomy is done as a palliative measure the relief from pain is quite enough to justify its performance.—*Ex.*

ICHTHYOL IN THE VULVAR PRURITUS OF PREGNANCY.—The *Riforma medica* gives these two formulas of Doizy's:

1.

- ℞ Ichthyol, parts 15.
Vaseline, parts 100.

M. For an ointment.

2.

- ℞ Ichthyol, parts 10.
Aq., parts 100.

M. For a lotion.—*The North Amer. Med. Rev.*

MORPHINE SOLUTION.—For use in threatened death, syncope, asphyxia, etc.:

- ℞ Morphinæ hydrochloratis,
ctgrm. 0.20.
Atropinæ sulphat. (neutral),
ctgrm. 0.02.
Aq. dest. bull., grm. 10.00.

Ferrand, Gas. des Hôpitaux.

ARTIFICIAL SERUM.—For subcutaneous or intravenous use:

- ℞ Sodii chloridi, 8.00.
Sodii saccharat., 0.33.
Aq., cc. 1,000.

This fluid more nearly approaches that of the blood than those in ordinary use, and has been employed with good results.—*Schucking, Deut. Med. Woch.*

INFANTILE GASTRO-ENTERITIS.—

- ℞ Emulsion castor ol., fl 3 vj.
Ol. menth. pip., gtt. iij.
Ol. cloves, gtt. v.
Tinct. iodine, gtt. x.
Chloroform, gtt. ij.

M. Sig. Teaspoonful every hour. Keep on ice.—*Bisnie, Columbus Med. Jour.*

CORYZA.—A powder prescribed by Greletty is:

- ℞ Betol, gr. 38.
Menthol, gr. 4.
Cocaine, gr. 8.
Powd. roasted coffee, gr. 68.
M.—*Le Progrès Méd.*

BRONCHITIS.—

- R** Apomorph. mur., gr. ss.
Pot. bromidi, 3 ij.
Syr. senegæ, q. s. ad fl. 3 ij.
- M.** Sig. Teaspoonful every two hours. (First or dry stage.)
- R** Am. mur.,
Am. brom., aa 3 j.
Spir. ætheris nit., fl. 3 ss.
Syr. pruni virg., q. s. ad fl. 3 ij.
- M.** Sig. Teaspoonful t. i. d. (Second stage.)
- R** Ammon. carb., ʒij.
Spir. chloroform, fl. 3 ss.
Infus. senegæ, fl. 3 viij.
- M.** Sig. Two tablespoonfuls every four to six hours.—*Fothergill.*
- R** Terebene, fl. 3 ss.
- Sig.** Two to five drops on sugar every four hours, according to child's age.—*Carmichael.*
- R** Terebene, 3 iiss.
Mucil. acacia,
Aq., aa fl. 3 ss.
Syr. zingiberi, q. s. ad fl. 3 ij.
- M.** Sig. Teaspoonful t. i. d. (In bronchitis with profuse mucopurulent expectoration.)—*Nicholls.*
- R** Ammonii chloridi, 3 j.
Ext. glycyrrhizæ fl., fl. 3 iv.
Aq. dest., q. s. ad fl. 3 iij.
- M.** Sig. One teaspoonful three times a day.
- R** Ammon. carb., gr. xxiv.
Syr. tolu, fl. 3 vj.
Spir. vini gal., fl. 3 iij.
Syr. senegæ, fl. 3 iiiss.
Syr. acaciæ, q. s. ad fl. 3 iij.
- M.** Sig. Teaspoonful every two hours. (In capillary form.)—*Goodhart and Starr, Dominion Medical Monthly.*

PNEUMONIA COMPLICATING MEASLES.

D. Walter Lester Carr said that the patient should be in a well-ventilated room having a temperature of 65° to 70° F., and the air should be kept moist with steam. The nares should be irrigated from time to time with saline solution at a temperature of 100° F. Friction between the scapula and in the axilla were serviceable in feeble infants. The child's crib should not be in the corner of the room or against the wall, and should be accessible from all sides without being in a draft. Counter-irritation to the chest by the application of one part of mustard to four or five of flour, or by the hot mustard bath, eases the labored breathing and calms the nervous system. Poulices should be eschewed, as their weight and the necessity of constantly renewing them made them harmful. The moderate use of steam in the room was beneficial when the breathing was difficult, or the mucous secretions thick and trouble-

some. Sometimes the addition of the compound tincture of benzoin or of turpentine would favor expectoration. Water was always allowable and should be given freely. As broncho-pneumonia is a protracted disease, more thought should be bestowed upon the feeding than is generally the case. Baths and wet packs are to be used to reduce high temperature, and frictions with water at a temperature of 90° to 95° F. seemed to him the best method of controlling the hyperpyrexia. He was opposed to the use of baths lower than 60° F. Codeia, in doses of $\frac{1}{4}$ to $\frac{1}{2}$ grain, would be found beneficial when there was much restlessness. Nitroglycerine would often relieve the pulmonary engorgement. Strychnine, especially the nitrate, was useful, and should be given in solution, preferably hypodermically. Digitalis steadies the heart, but its contraction of the arterioles interferes somewhat with its use. Whiskey and brandy are needed in almost every case of broncho-pneumonia, not always early in the disease, but when the vitality is low or there is atelectasis it is most valuable. Alcoholics should not be given as a routine, but most children are the better for the administration of alcohol some time in the course of a broncho-pneumonia. Creosote, in half to one minim doses, or two to eight drops of the carbonate, made an excellent addition to malt extract for these patients. He did not hesitate to administer cod liver oil in every case, unless the temperature were high, it favored expectoration. Quinine was helpful in a few cases in which the disease was protracted and was characterized by an irregular temperature, due to infection with pus germs. He did not favor the use of the coal-tar products, or nauseating expectorants, and he called attention to the fact that as young children do not expectorate, the use of such drugs often did nothing more than disturb the stomach.—*Pediatrics.*

SPRAY FOR PHARYNGITIS SICCA.—

- R** Acidi carbolic, gr. x.
Tinct. iodi,
Tinct. aloes,
Tinct. opii, aa gtt. x.
Glycerini, q. s. ad 3 j.
- M.** Sig. To be used as a spray several times daily.—*Ex.*

NEURALGIA.—

- R** Chloral, ʒ.5.
Menthol, ʒ.6.
Cacao butter, 2.0.
Spermaceti, 1.0.
- Mayet, Med. Rec.*

PROPHYLACTIC TREATMENT OF YELLOW FEVER.—

R Quininae sulph.,
Cinchonidinæ sulph., aa gr.
100.
Pulv. lactopeptin,
Pulv. sacchari lactis, aa gr. 50.
M. ft. capsulæ No. 100. Sig. One
three times a day, one hour before or
after meals.
For children under five years:
R Tinct. xanthoxyli,
Glycerin, aa 3 ss.
Batley's liquor cinchonæ, 3 vij.
M. Sig. One dram t. i. d.—*Tébault, Med. Rec.*

TAPEWORM.—Dr. J. Sasse describes (*Medisch. Weekblad. voor Noord-en Zuid-Nederland*) the methods employed by Man and Quanjer, of Holland. These two men are both of the opinion that oleum ricini should not be used in association with male fern as a laxative in the treatment of tapeworm, since filicic acid forms a readily absorbable compound with the oil, capable of producing symptoms of poisoning.

Quanjer's method is as follows: A preparatory course is not necessary, but the patient is kept in bed until the worm is driven off. At seven o'clock in the morning he receives thirty-five to forty grams of aq. laxat. Viennensis. Quanjer employs five grams of filicin, divided into eight or ten parts and administered in soft gelatin capsules (hard capsules are to be avoided). At eight o'clock the patient takes the first two capsules, and then every ten minutes two more until all are taken, each time with a sip of port wine or madeira to prevent nausea. The bowels usually move about ten or eleven o'clock; if not, then another dose of laxative is administered. This method never fails in expelling the entire worm.

Man's method is to administer a laxative on the day previous, so as to soften the scybala and permit access to the parasite. On the evening before he orders wine and water to be drunk, but allows no milk. The next morning at eight o'clock the patient receives in repeated doses the ethereal extract of filix mas in capsule or pill form up to twenty or twenty-five grams, and as much wine and water as he cares to drink. Usually a laxative is not necessary. By eleven o'clock as a rule the worm is discharged, and the patient is allowed to get up. Sasse reports twenty-seven cases and as many cures; the absence of poisonous symptoms he believes is referable to the non-employment of castor oil. In those cases in which filicin is con-

traindicated on account of marked nausea or vomiting, he resorts to the copper treatment of Hager-Schmidt:

R Oxyd. nigr. cupri, 6.
Cretæ præp., 2.
Argillæ alb., 12.
Glycerini, 10.
M. ft. pil. No. 120.
For the first week, two pills four times daily, and during the second week, three pills four times a day; finally a dose of oleum ricini. No preparatory treatment is necessary; all sour substances are to be avoided. *Med. Record.*

TONSILLITIS.—In chronic cases subject to acute exacerbations, apply directly to the inflamed area:

R Tinct. aconit. rad., m xxx.
Tinct. belladonna, 3 j.
Tinct. ferri chlor., 3 ij.
Tinct. iodi comp., 3 iiss.
Glycerini, q. s. ad 3 j.
Sig. Apply with brush.—*Fabrics, The Med. Standard.*

SCIATICA.—

R Orthoformi, 0.70.
Guaiacol crystal, 13.50.
Chloroform (c. p.), 17.20.

To be used in the same dose and with the same precautions, hypodermatically, as simple chloroformized guaiacol. Originally recommended by Colleville.—*Gaz. Hebdomadaire de Méd. et de Chir.*

PITYRIASIS CAPITIS.—The *Riforma Medica* gives the following formula:

R Resorcin, parts 8.
Alcohol,
Glycerine, aa parts 15.
Aq. rosæ, parts 120.
M. Sig. To be applied with friction.—*N. Y. Med. Jour.*

DIARRHEA AND DYSENTERY.—

R Dover's powder, gr. xxiv.
Salol, 3 ss.
Bismuth subnit., 3 j.
M. ft. caps. No. xij. Sig. One every two, three or four hours.—*Med. Summary.*

ATONIA INTESTINALIS.—

R Sodii benzoatis,
Pulv. rad. rhei, aa 5.0.
Pulv. nucis vom., 0.02.
M. Sig. One powder two or three times a day.—*Huchard, Med. Rec.*

RHEUMATISM.—

R Fl. ext. manaca, 3 iij.
Kali iodide, 3 iiss.
Vin. colchicum (s), 3 ij.
Simp. syr. q. s. ad 3 iij.
M. Sig. One teaspoonful each four hours.—*Med. and Surg. Monitor.*

QUINSY.—

℞ Tinct. veratri viridis, (Norwood), gtt. xxx.
Morphinæ sulphatis, gr. iss.
Aq., 3 vj.

M. Sig. Dose for an adult one dram to be repeated according to judgment in one hour, then every two or three hours, according to the effect of the morphin.

℞ Acidi tannici, 3 j.
Glycerini,
Aq. rosæ, aa 3 j.
Aq. chloroformi, 3 viij.

M. Sig. Tannin gargle.—*Blake, Ex.*

NAFTALAN IN ECZEMA.—Rosenbaum (*Therapist*) says that this substance in burns and acute eczema has given good results, and he has been successful with it in the treatment of chronic eczema. In some cases it has cured where all other remedies have failed. In the occupation eczemas especially good results have been achieved. One of the cases detailed by the author was that of chronic eczema, which appeared like ichthyosis, of twenty years' standing. Various treatments had been employed, but no improvement had followed. After forty days' treatment with naftalan the patient was discharged cured.—*Ex.*

CHILDREN'S EMETIC.—

℞ Pulv. ipecacuan., gr. 7½.
Antimonii et potassii lactatis,
gr. 4.
Oxymel scillæ, 3 2¼.
Aq. destill., q. s. ad 3 i.

M. Sig. One teaspoonful every ten minutes.—*Baginsky, Med. Rec.*

COUGH-SYRUP.—

℞ Syr. of wild cherry, 3 iv.
Comp. syr. of squill, 3 ij.
Tinct. of bloodroot, 3 ss.
Mucilage of acacia, 3 j.
Syr. of tolu, 3 ss.

M. Dose, one teaspoonful every two or three hours.—*Jour. Amer. Med. Asso.*

CHRONIC DIARRHEA.—I. Burney Yeo (*Lancet*) reports the case of a man forty-six years of age, who, at intervals during three years, had had recurrence of diarrhea, which had been kept under control by the usual remedies until this last attack. At the time the patient was seen the attack had already lasted one month, patient was very much emaciated and was steadily losing strength. Milk diet was recommended, beginning with three pints daily and gradually increasing as the patient improved, and in addition he took a teaspoonful

of pancreatic emulsion twice a day. Coto bark was used to calm the irritable condition of intestinal canal. In less than a fortnight under this treatment the patient improved daily, and the diarrhea had entirely ceased. After some weeks an attempt was made to leave off the pancreatic emulsion and this was attended by immediate diarrhea and a loss in weight of two pounds in a few days, while on the resumption of the emulsion the patient again returned to his normal condition.—*Med. Review.*

APHTHÆ.—

℞ Sodii sulph.,
Fl. ext. hydrastis (c'l'ri'as),
Glycerin, aa 3 ij.
Aq. camph.,
Aq. rosæ, aa ad 3 iv.

M. Sig. Use freely as a mouth wash.—*Med. Sum.*

THERAPEUTIC VALUE OF MARMOREK'S SERUM.—

1. In pure streptococcic infections the serum undoubtedly exercises a favorable influence on the course of the disease.

2. In mixed infections the influence of the serum was demonstrable, but it merits further trial as an adjunct to other treatment.

3. Considering the grave character of complications of non-streptococcic nature reported, ordinary rules of therapeutics would demand that in such cases, as with the diphtheria antitoxin, all indicated therapeutic procedures must be employed as well as the serum.

4. In view of the fact that erysipelas streptococci and phagocytes often exist side by side in the lymph channels, it is fair to assume that the influence of the serum is directly exerted bactericidally on the streptococci and not entirely through stimulation of phagocytic action.

5. The initial dose in all cases should be 20 cc., to be followed by 10 or 15 cc., according to the indications, each twenty-four hours.—*Baum, Medicine.*

SORE OR CRACKED NIPPLES.—

℞ Castor ol.,
Subnitrate of bismuth, aa 3 j.

This is applied freely to the sore nipple.—*Hirst, Med. Rec.*

HÆMOPTYSIS OF TUBERCULOSIS.—

℞ Gelatin, grm. 7.
Sodii chloridi, grm. 20.
Aq., grm. 1,000.

Dissolve with heat, filter, and sterilize. Inject at first 50 cc. beneath the skin of the abdomen.—*Med. Rec.*

PRURITUS OF THE SCROTUM.—

- R Phenic acid, 3 v.
Glycerine, fl. ʒ iiii.
Proof spir., fl. 3 vj.
• Aq., fl. ʒ x.

M. Sig. From one to four tablespoonfuls to be added to a glass of hot water, and applied locally three or four times daily. In addition quinine sulphate with sodium bicarbonate may be administered internally.—*Brocq, Phila. Med. Jour.*

INSOMNIA OF ALCOHOLISM.—

- R Ess. Jam. ginger,
Spir. amm. aromat.,
Tinct. valerian, aa ʒ ij.
Sat. solut. potass. brom., q. s.
ʒ viij.

M. Sig. One tablespoonful in water every three to four hours.—*Hunt, Pacific Med. Jour.*

HEMOSTATICS IN THREATENED ABORTION.—In hemorrhage resulting from threatened abortion the custom is after providing the means destined to calm the uterine contractions—opium, rest, ice to the hypogastrium—to prescribe an hemostatic agent which will not provoke tetanic contractions of the organ, such as *hydrastis canadensis*, *viburnum prunifolium*, or *hamamelis virginica*. According to Prof. Bossi, these agents prescribed alone are not always to be relied upon, on account of the difference of temperament so frequently witnessed in patients. Much disappointment would be obviated if these agents were prescribed together according to the following formula:

- R Fl. ext. *hydrastis canadensis*.
Fl. ext. *hamamelis virginica*,
Fl. ext. *viburnum prunifolium*,
Tinct. *piscidia erythrina*, aa
3 ij.
Laudanum, m xxx.

A teaspoonful of this mixture to be given every eight hours if necessary.—*Paris Cor. Med. Press and Circular.*

TREATMENT OF OZENA WITH CITRIC ACID.—Hamm (*Munch. med. Wochens.*) recommends citric acid, not as a specific cure, but as a remedy which at once alleviates and deodorizes. All fruit juices have a deodorant effect; hence, the widespread belief of the laity that to eat fruit on going to bed will insure the presence of a sweet breath upon rising. Billroth used to deodorize fetid cancers by the application of poultices made of fresh figs.

The patient should wash out the nasal fossa every morning, and when the cavities are thoroughly freed

from secretions and crusts should have the powdered acid applied with a powder-blower. This application should be repeated twice during the day. The acid should be diluted with sugar of milk, if desired. Author guarantees improvement, absolute removal of fetor, and indirect benefit to the general state through disappearance of fetor.—*Med. Review of Reviews.*

LUPUS.—Unna, at the *Aerztlicher Verein*, at Hamburg, recommended the following ointment in the treatment of lupus:

- R Acid. salicyl.,
Liq. antim. chlor., aa 3 ss.
Creosot.,
Ext. cannabis indic., aa 3 j.
Adipis lanæ, 3 ij.
Ft. ungt.—*The Therapist.*

SYCOSIS OF THE UPPER LIP.—The failure to successfully treat this part depends, according to Unna (*Semaine Médicale, Boston Med. and Surg. Jour.*), on the constantly acting re-infection by the nasal discharges, as a consequence of rubbing the part with a handkerchief. Instead of using this last, the patient is advised to employ nasal lavage with a decoction of quinquina. The dressing of the part consists of a salve or plaster of oxide of zinc and sulphur, without ichthyol; this is put on every time after the patient is through with his nasal syringe, which is to replace the handkerchief. Epilation is rarely necessary.—*Dunghison's College and Clinical Record.*

RHEUMATISM.—

- R Ac. salicyl, pulv.,
Ol. terebinth., aa 3 j.
Lanolin, ʒ j.

M. Sig. Use as an ointment, first cleaning the skin with soap and water. Use friction for five minutes.—*Husson, Revue de Thérapie.*

TRIGEMINAL NEURALGIA.—

- R Tinct. aconiti, 3 ss.
Tinct. gelsemii, ad 3 v.

M. Sig. Take ten drops every twenty minutes until pain is relieved; not, however, to exceed eight doses, and stop earlier if any tingling is felt in the tips of fingers.—*Whitney, Ex.*

PERSISTENT DIARRHEA OF CHILDREN.

- R Argenti nitratis, gr. j.
Acidi nitrici dil., gtt. v.
Mucilaginis acaciæ,
Syr. aurantic, aa 3 iv.

M. Sig. Take a teaspoonful every three or four hours.—*Jour. Med. and Science.*

WHOOPIING-COUGH.—Dr. R. B. Gilbert, of Louisville, in *Practitioner and News*, says regarding the treatment of whooping-cough:

The remedies I use are not new, nor do I claim originality in their application. I may claim that I push the dosage to their full effect faster than is deemed advisable by others. The great danger of life, especially in the young infant with whooping-cough in hot weather, fully justifies the procedure.

The moment the disease is recognized, I order an average dose of tincture of belladonna given once every eight hours, the dose to be increased by one drop daily until the full physiological effect is obtained, viz.: Widely dilated pupils, flushed cheeks, dry fauces, etc., the maximum dose being reached in five or six days. The maximum dose is continued until there is a decided lessening of the severity of the cough, which may be confidently expected within 10 days from the beginning of treatment. In addition to the belladonna I give, every three hours during the night, full doses of potassium bromide combined with phenacetin, which insures prolonged, tranquil sleep and fewer coughing spells.

For a child one year old I write thus:

R Tinct. belladonna, 3 j.

Sig. One drop every eight hours, increasing one drop each day till the tenth day. Label bottle No. 1. Also:

R Potass. bromide, 3 ij.

Phenacetin, gr. x.

Mucil. acacia,

Aq., aa 3 j.

M. ft. sol. Sig. Teaspoonful every three hours during the night. Label bottle No. 2.—*Med. Sum.*

MISTAKES OF DIAGNOSIS IN SKIN AFFECTIONS.—Dr. Cantrell states that the mistakes of diagnosis in skin affections are more to be deplored than the improper selection of drugs; common sense, after diagnosis is stated, should be the one governing power of treatment.—*Phila. Polyclinic*.

WARTS.—

R Salicylic acid, gr. xxx.

Acetic acid, 3 j.

M. Sig. Apply with a camel's hair brush.—*Louisville Med. Mon.*

WHOOPIING-COUGH.—In the treatment of whooping-cough, Milton P. Creel, M. D., Central City, Ky., has found very material assistance in allowing the Schering formalin lamp in the sleeping-room of the patient.

By keeping the flame of the lamp low, only one formalin pastille is consumed in three or four hours. This causes little if any irritation, and after a short time the child goes to sleep. The inhalation of the disinfectant exerts a decided curative action upon the affection.—*Medical Review*.

ACUTE PHARYNGITIS.—

R Ext. eucalypti, gr. xxx.

Sodii bichloratis, gr. x.

Pulveris pimentæ, gr. viij.

Ext. glycyrrhizæ, 3 iiss.

M. ft. massa in trochisci No. xxx, div.—*Bosworth, Ex.*

ACUTE GASTRO-ENTERITIS.—In a number of cases of acute gastro-enteritis with anorexia, nausea, vomiting and frequent small loose stools, occurring during the hot season in the sequence of indiscretions in diet, and particularly of the copious libations of ice-water, Dr. Eshner prescribed (*Phila. Polyclinic*):

R Ext. hæmatoxylon, 3 ij.

Aromat. sulphuric acid, fl. 3 ij.

Camph. tinct. opii,

Aq. cinnamon, aa fl. 3 iss.

M. Sig. One fluidrachm every three hours if the bowels continue to be moved that often, or less frequently, according to circumstances. *Dunglison's College and Clinical Record*.

SCLERITIS OF TRAUMATIC ORIGIN. In the treatment of scleritis of traumatic origin, Dr. Hansell (*Phila. Polyclinic*) prefers the use of strontium salicylate to the sodium salicylate in the usual doses, on account of the freedom from the head symptoms so frequently induced by the latter. A case at present under observation demonstrates that sixty grains daily may be given without unpleasant effects and with curative action on the inflammation.—*Dunglison's College and Clinical Record*.

TO CHECK MILK SECRETION.—

R Atropinæ sulphat., gr. ʒj.

Magnes. sulphat., ʒ 2 + 3 6½.

Infus. gentianæ, ʒ 7½.

M. Sig. Tablespoonful every two hours.—*Gaz. Hebdomad.*

MIGRAINE.—

R Methylene blue,

Ext. of nux vomica, aa o.oi.

Steindler, Med. Rec.

INJECTIO COCAINI HYPODERMICA.—

R Cocain. hydrochlor., i.

Acid. salicylici, o.oi5.

Aq. destil. bull., 1o.

Pharm. Britan.





2 gal
111 +